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BY

C. H. FORBES-LINDSAY

AUTHOR OF

"The Philippines, Under Spanish and American Rules",

"Panama, the Isthmus and the Canal", "India,

Past and Present", etc.

IN TWO VOLUMES

VOL. II

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PHILADELPHIA

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1906

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Dedicated

BY PERMISSION TO THE

HONORABLE WILLIAM H. TAFT

First Civil Governor of the Philippines

THAN WHOM NONE HAS LABORED MORE ASSIDUOUSLY

IN THE CAUSE OF THE FILIPINO

For my statements regarding industries, resources, etc., I have depended, in the main, upon the ample sources of information afforded by the U. S. War Department, having been taught by experience to regard them as the most reliable.

I have avoided polemic discussion, because there are others much better qualified than myself to pass opinion on the controversial questions connected with the Philippines; but that the reader, who will naturally look for some such expressions in a book of this kind, may be satisfied, I have fully remedied the deficiency on my part by inserting a chapter of extracts from public addresses delivered by the Honorable William H. Taft, who is recognized as the foremost authority on our insular possessions in the Pacific. These addresses are the most direct, logical, and consistent statements of the conditions and prospects in the Philippine Islands, as well as the most clear and unequivocal expression of the policy of the American Government towards those islands. I much regret that the quotations are, necessarily, limited to a few brief extracts and strongly recommend the reading of the addresses *in extenso* to all who would have a clear idea of our relations to the Philippines and the problems involved in their administration.

I take this opportunity to acknowledge my obligations to Colonel Clarence R. Edwards, Chief of the Bureau of Insular Affairs, and the Assistant Chief, Captain Frank McIntyre, who have rendered me valuable assistance in the preparation of this volume.

Philadelphia, April, 1906.

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GENERAL DESCRIPTION

THE PHILIPPINES.

I.

GENERAL DESCRIPTION.

Physical Features—Luzon—Taal Lake and Volcano—The Story of an Eruption—Mayon Volcano—Rivers of Luzon—Cagayan and Isabela—Abra, Lepanto-Bontoc, and Nueva Vizcaya—Ilocos Norte, Ilocos Sur and La Union—Benguet—Pangasinan—Zambales—Bataan—Tarlac—Pampanga—Nueva Ecija—Bulacan—Rizal—Laguna—Cavite—Batangas—Tayabas—Ambos Camarines—Albay—Sorsogon—Railroad Extension—Marinduque—The Island of Mindoro—The Visayan Group—Masbate—Samar—Leyte—Bohol—Cebu—Negros—Panay—Paragua—Mindanao—Sulu—Tawi Tawi—Fauna—Flora—Vegetable Products of Commercial Value—Minerals—Climate.

The Philippine Archipelago extends from $4^{\circ} 40'$ to $21^{\circ} 10'$ north latitude and lies between the meridians of $116^{\circ} 40'$ and $126^{\circ} 34'$ east longitude. The chain of islands commences in the north at a point within one hundred miles of Formosa and terminates with the Sulu Group, lying close to the northeast coast of Borneo. The nearest land on the east is one of the Pelew Islands, in the possession of Germany, five hundred and ten miles distant, and on the west, Cochin China, distant five hundred and fifteen miles.

The most recent official enumeration gives a total of 3,141 islands to the Archipelago. Three-fourths of that number have areas of less than a square mile each; one-half are unnamed; and by far the majority are uninhabited. The aggregate area of the islands is 115,000 square miles; that is, greater than the combined areas of the States of New York, New Jersey, Pennsylvania and Delaware.

In the broadest territorial division, the principal islands are thus classified:

Island.	Area in Sq. Miles.	Population.
1. Luzon	40,969	3,798,507
2. Marinduque	352	50,601
3. Mindoro	3,851	28,361
4. Paragua, or Palawan	4,027	10,918
5. Visayan Islands.		
Masbate	1,236	29,451
Samar	5,031	222,690
Leyte	2,722	357,641
Bohol	1,141	243,148
Cebu	1,762	592,247
Negros	4,881	460,776
Panay	4,611	743,646
6. Mindanao	36,292	499,634
7. Sulu Archipelago.		
Sulu, or Jolo	326	44,718
Tawi Tawi	232	1,179

PHYSICAL FEATURES.

The prevailing physical features of the Philippines are mountain and forest. There are several broad valleys intersected by numerous streams, but ex-

tensive plains and large rivers comparable with continental standards are not to be found in the islands. The Philippines have no deserts, nor even barren lava beds. Everywhere vegetation flourishes in exuberant variety. Very little of the scenery can be fairly termed grand, but almost everywhere it is made beautiful by the diversity and abundance of vegetation which covers the hills and the lower slopes of the mountains. About seventy per cent. of the entire surface of the islands is covered with forest, including some of the most valuable species of trees in the world.

The Archipelago is of volcanic origin, evidences of which are everywhere to be found in extinct or dormant volcanoes, at least ten having records of activity.

To such an extent are the shores of the islands indented that, although their area is but one twenty-sixth that of the mainland of the United States, the coast line of the latter is less than half that of the Philippine Islands. Such a formation would generally indicate the presence of a great number of harbors, but as a matter of fact there are comparatively few of present commercial utility. Shoals and reefs; the absence of lights and channel buoys; and the lack of reliable charts render many deep water anchorages impracticable for vessels of heavy burthen. Most of the anchorages are only available during a portion of the year owing to the alternating character of the winds. From June to October the wind sets

in from the southwest, and during the remainder of the year the northwest monsoons prevail. There are, however, some exceptionally good harbors, that of Manila, upon which extensive improvements are rapidly progressing toward completion, being one of the very best in the Orient. With the exception of Bohol, each of the principal islands has at least one harbor capable of accommodating vessels of the greatest draft.

There are but three rivers attaining a length of two hundred miles, namely, the Rio Grande de Cagayan, of Luzon, and the Rio Grande and Agusan, of Mindanao. Aside from these, and the Pampanga, the Agno and the Abra, all of Luzon, there are no rivers in the islands exceeding a length of one hundred miles. However, economic importance cannot always be gauged by figures. The Pasig, one of the shortest rivers in the country, carries the greatest commerce. It may be mentioned here as a curious fact, that the Lanao, of Negros, although only nine miles in total length, has a width of one thousand feet and is twenty feet deep.

LUZON.

Luzon is the chief island of the Archipelago, and has contained the seat of government since the time of Legaspi. It is paramount in the matters of area, population and development. Its greatest length from northwest to southeast is four hundred and

eighty-nine miles, and its utmost breadth one hundred and thirty-eight miles. Its principal mountain range is the Sierra Madre, which, commencing in the extreme northeast corner of the island, follows an unbroken course of three hundred and fifty miles along the eastern coast to the Laguna de Bay. The general elevation of the Sierra Madre is from 3,500 to 4,500 feet, the latter figures being exceeded by a few summits. This range forms the eastern boundary of the great valley of the Cagayan, one of the two large and fertile stretches of comparative level on the island. Its length is one hundred and sixty miles and its breadth fifty miles. On the west the valley is bounded by the conglomeration of elevations and short mountain ranges styled the Caraballos Occidentales, covering an area two hundred miles in length by seventy miles in breadth. This complex system embraces several peaks exceeding 6,000 feet in altitude. At the south, as at the north, a subsidiary range effects a junction between the Caraballos Occidentales and the Sierra Madre, so that these two mountain systems convert the northern part of Luzon into a basin of which they form the sides.

The Zambales range extends the length of the province of that name, closely following the coast. It includes many summits higher than 5,000 feet, and for a considerable distance maintains an average elevation of 4,000 feet. Extending fifty miles eastward from this range and southward to the distance of one hun-

dred and fifty miles from Lingayen Gulf, is a great, flat depression traversed by the rivers Pampanga, Agno and Pasig, and by innumerable small streams. A great deal of the land is alluvial soil. The valley is extremely fertile, and supports 1,750,000 souls, being about two-fifths of the population of the entire island. At the southern end of this valley is Laguna de Bay, a large, shallow body of water at no point more than twenty feet in depth. It is the source of the Pasig, at the mouth of which stands Manila. The shores of Laguna de Bay are thickly settled. A very large traffic is carried on amongst the towns and villages along its littoral and between them and Manila.

Southern Luzon has no defined mountain system, but grouped summits and isolated volcanic peaks are scattered over its surface.

TAAL LAKE AND VOLCANO.

Laguna de Bombon, or Lake Taal, is one of the most curious natural formations in the world. It is an immense crater, seventeen miles long by twelve miles in breadth, surrounded, except upon the southern end, by a clearly defined rim several hundred feet in height, towards which the neighboring country gradually slopes. Upon the edge of the lake are several elevations of volcanic character, and from an island in the center rises, to a height of one thousand feet, an active volcano, several eruptions of which have been recorded. Different theories have

THE HIGHLANDS OF BENGUET.

These beautiful mountains boast scenery equal to that of the Tyrol, a climate temperate and bracing, rich mineral deposits, and vegetable products ranging from coffee to apples.



been advanced by scientific observers to account for the phenomenon of Lake Bombon. Father Zuniga expressed the opinion that the lake originated from the collapse of a volcanic cone. Doctor Becker attributes the present formation to the combined action of eruptions and cataclysms, and concludes that the peak "Taal itself is the small inner cone of a great crater of explosion." Mr. H. D. Caskey, B. S., says: "My own notes and observations in these provinces tend to the belief that Taal was unquestionably, at a prehistoric period, very high and of tremendous activity; that it stood partly surrounded, if not wholly, by a stretch of the sea extending from the Gulf of Batangas to the Lingayen Gulf; that during its activity large quantities of volcanic ejecta fell into this island sea, forming the more or less stratified deposits of tuff now furnishing much of the rich soil of the provinces of Batangas, La Laguna, Cavite, Rizal, and Bulacan; that an explosion, or a series of them, blew out the entire upper cone, leaving the rim of the present boundaries of the Lake Taal; and that subsequently minor cones were formed and this region was gradually raised to its present level." During historic times this volcano has undergone the most remarkable changes and new craters have been formed on three or four occasions. Of the several recorded eruptions of Taal, that of 1754 is the most notable. The following is from the account of Father Buenuchillo, the parish priest of Taal at the time:

THE STORY OF AN ERUPTION.

“It began on May 13th and did not end till the 1st of December. During this time the intensity and aspect of the eruption were constantly changing. It was two hundred days of devastation and ruin for the inhabitants, to whom the time must have appeared an eternity. During this time the principal towns of the Laguna of Bombon disappeared, viz., Sala, Lipa, Tanuan, and Taal, with the numerous villages around them. Other towns of the same province at a distance, as well as towns of the neighboring provinces of Balayan, Batangas, and Bauan, also suffered great damage. Rosario, Santo Tomas, and San Pablo also felt the effect of the rain of ashes and scorixæ, as also did almost all the provinces below the center of Luzon. The quantity of ashes and scorixæ which was sent up by the volcano was so great that a large quantity of pumice stone appeared on the surface of the Laguna; and several villages around Tanuan and others around Taal, being near the volcano, and because the wind was east, were totally destroyed by this rain.”

The eruption continued, with greater or less intensity, but continuously, till the 10th of July, when the nature of the volcanic rain changed, as may be gathered from the following words:

“There was not a single night throughout the whole of this month of June till July 10th in which flames

were wanting on the volcano, or in which there were not rumbling noises. This went on till July 10th, when it rained mud over the town of Taal, and the mud was of so black a character that ink would not have stained so blackly, and when the wind changed the mud covered a village called Balele, which is near Sala, which village was the most fertile of the whole district. The volcano continued to throw out, with more or less intensity, flames and black smoke during July and August and part of September, till, on the 25th of this last month, it appeared as if the volcano wished to parade all its forces against us, because on that date, to the horrible rumblings and the tremendous flames, was joined a tempest which originated in the cloud of smoke. The lightnings which accompanied the storm continued without interruption till December 4th. It is truly marvelous that the cloud lasted for more than two months. Over and above this, there was from the same 25th of September till the morning of the 26th such a copious rain of pumice stones that we were obliged to abandon our homes for fear the stones would break through the roof, as indeed happened in some houses. We were thus compelled to flee through this hail of stones, and some were wounded by the stones falling on their heads. During that one night the ground was covered with scorixæ and ashes to the depth of a foot and a half, thus destroying and drying up the trees and plants as if a fire had passed over them.

“The activity of the volcano continued with short intervals of quiet during the months of October and November. On the evening of the feast of All Saints the volcano again began to vomit forth fire, stones, sand, mud, and ashes in a greater quantity than ever. This went on till November 15th, on which date, after vespers, there commenced a succession of rumblings so loud as to deafen one, and the volcano began to vomit forth smoke so dense and black as to darken the atmosphere, and at the same time such a quantity of large stones fell into the lake as to cause big waves; the earth trembled, the houses shook, and yet this was but the preparation for a fresh rain of scorix and ashes which lasted the whole of the afternoon and part of the night.

.
“Notwithstanding the disaster that had overtaken us, I still remained in the said town, together with the chief justice of the province, till on the night of the 27th (November) the volcano began once again to vomit such a quantity of flames that it seemed as if all that had been erupted during the preceding months together did not equal that which was thrown forth during that hour.

“Every moment the violence of the volcano increased so that the whole of the island (that is, the island in the lake) was covered with fire. This increasing volcanic activity, accompanied, as it was, by frightful subterranean rumblings and earthquakes,

caused the unfortunate inhabitants to abandon their town and at any risk to gain the heights which rise between it and Santuario de Caysasay.

"Thus passed the 28th, but on the morning of the 29th smoke was observed rising in various points of the island from Calautit to the crater in a straight line, just as if a fissure had been opened all along the line. Between 4 and 6 o'clock of the same evening the horizon darkened, leaving us in complete darkness, and at the same time it began to rain mud, ashes, and sand, and although not in such quantities as before, yet it kept on without interruption the whole of that night and the morning of the 30th.

"The rain of mud ceased somewhat at 4 o'clock in the afternoon. It then measured a meter in depth in Santuario de Caysasay, which is distant about four leagues from the volcano. In some places near the island the depth of the mud, etc., reached more than three yards. The rain of ashes completely ceased on the 1st of December, and then a hurricane, which lasted two days, came to put the finishing touches to so many disasters by tearing up the little that had been left standing."

The simple and pathetic narrative of this priest is one of several similar stories extant of the eruptions of this and other volcanoes; indeed this was by no means the only experience of the kind that Father Buenuchillo survived.

MAYON VOLCANO.

With the exception of Taal, Mayon, on the east coast of the province of Albay, is the most notable volcano for its activity in the Archipelago. It rises to a height of 7,916 feet in an almost perfect cone with a slightly truncated apex, from which it constantly emits smoke and steam. Doctor Becker says: "It is possibly the most symmetrically beautiful volcanic cone in the world, and at times its crater is almost infinitesimal, so that the meridional curve of the cone is continuous almost to the axis." Mayon has been in eruption on countless occasions since the discovery of the islands. Father Coronas records nearly thirty eruptions between the years 1616 and 1897. Some of these were very serious in their consequences. In 1814 about twelve hundred lives were lost, and in many instances the towns at the base of the volcano have suffered severely. This has not deterred the natives from repopulating the same spots. At the present time sites on the southern base of Mayon are occupied by Legaspi, Albay, and Daraga. At the time of the Spanish conquest one of the most numerous communities was settled in the vicinity of Taal, and the district has always been notably populous.

Earthquakes are frequent, and have often been very destructive, notably that of December, 1645, which laid Manila in ruins. One of the most re-

markable seismic disturbances of record began in Nueva Vizcaya on the 3d day of January, 1881. During that month, May, July, August, and September the shocks were almost incessant, some of the waves extending over the entire island of Luzon. Father Maso, the Assistant Director of the Philippine Weather Bureau, remarks, with the satisfaction of the scientist, that "Manila is most advantageously situated for experiencing almost all the shocks radiating from the different centers of Luzon." In a long course of years the average of seismic disturbances at Manila has been one a month. In the great majority of instances they have been hardly noticeable shocks. Since the sixteenth century the capital has been visited by thirty-two violent earthquakes. The last destructive shock was in July, 1880, when the city was considerably damaged.

The northern islands of the Archipelago are subject to violent cyclones which do immense injury to standing crops and buildings. The destructive effects of these natural visitations are decreasing as the people learn to adopt measures for minimizing them, and, as in our western States, Nature compensates for occasional turbulence by her serenity and bounteousness at other times.

RIVERS OF LUZON.

Luzon has three rivers which greatly surpass all others of the island in drainage basin, length, and

navigability; these are the Cagayan, the Agno, and the Pampanga.

The Cagayan, popularly called El Tajo (the incision), drains one-fourth of the entire island. Rising in Caraballos Sur, at the southern boundary of Isabela Province, it follows a northward course to its mouth at Aparri, distant upwards of two hundred miles from its source. It is navigable for native boats as far as one hundred and sixty miles from the sea, and rafts may travel to within twenty miles of its headwaters. Like most of the rivers of the Philippines, it forms a bar at its mouth which is a serious obstruction to traffic. Vessels which are excluded by these impediments would often find beyond them ample water to carry them far up stream. The Cagayan carries the entire produce, consisting largely of tobacco, of the provinces of Isabela and Cagayan to the port of Aparri. This very extensive and important traffic is fed by the contributions of the two principal tributaries of the river, which are navigable, one for twenty miles and the other for forty miles from the points of juncture.

The Agno rises in the mountains of Benguet Province. It flows through the northern portion of the great central valley of Luzon and reaches the Gulf of Lingayen through several mouths at important commercial points, carrying a considerable burden of produce.

The Pampanga, which is second in size to the

Cagayan, has its source in the same mountain range as the latter, and pursuing an opposite course, along which it is joined by many branches, discharges into Manila Bay through several channels, forming an extensive delta.

The Pasig runs from Laguna de Bay to the Bay of Manila, a distance of about eighteen miles. The city of Manila is situated at the mouth of the river. The Pasig has a considerable depth and width, and is at all times navigable by the *cascos*, large native cargo boats which carry on enormous traffic between the city and the lake.

Hitherto the rivers of the Archipelago have been the principal inland channels of trade, owing to the almost total absence of railroad and the impassability of most highways during the rains. Whilst these waterways will always afford convenient and economical means for the movement of native produce, with the development of the islands and the completion of projected transportation facilities much of the traffic must be diverted to the railway; indeed, the path of the locomotive will necessarily conform to the general direction of the principal rivers.

There is hardly a province of Luzon but has a wealth of resources of varied descriptions; many, perhaps most, of them quite undeveloped. One may hazard the prediction that under a liberal policy of government and with the aid of American capital and enterprise, this island is destined to become one of

the most productive and prosperous regions of its size in the world.

At present we will take only a cursory view of the several provinces, with special regard to their economic condition and possibilities, leaving more particular consideration of the principal resources and industries for another portion of the volume.

CAGAYAN AND ISABELA.

These provinces are the main field of tobacco cultivation. The entire district is extremely fertile. Hon. William H. Taft, writing in 1901, said: "The enormous capacity for development of this valley, which includes the provinces of Cagayan and Isabela, can hardly be exaggerated. It is a common thing for the natives to use their land seven or eight months in the year for tobacco and then to derive two successful crops of corn in the four or five remaining months of the year. There are some very large *haciendas* owned by tobacco companies, but after Spain ceased to conduct her monopoly of the tobacco business, she divided up much of the tobacco land among the tenants, and there are now in both provinces a great number of small holders working their own land, and the great business of the valley is tobacco buying."

The district is traversed by a wagon road, with an extensive system of branches connecting the most important towns in the provinces. This highway is

an integral portion of the trunk road which extends from Aparri to Manila, taking a route which will be followed by one of the proposed new railroads. Almost all the main roads of the island are paralleled by telegraph lines.

ABRA, LEPANTO-BONTOC, AND NUEVA VIZCAYA.

These provincial divisions comprise a region which is in a somewhat backward condition, due largely to physical conditions unfavorable to the successful pursuit of agriculture. Despite the extremely rugged character of its surface, Abra has a considerable area of rich alluvial soil in the valleys which yields its scant population bountiful returns for their tillage. The province is enclosed on every side by a barrier of impassable mountains, and the only outlet is along the bed of the river. The other two provinces in this group are even less promising from an agricultural outlook, but they may in the future achieve a considerable degree of prosperity by reason of their mineral resources. Lepanto-Bontoc is extremely rich in copper of a high grade. At one time the mines of Mancayan produced about five hundred tons of metal annually.

ILOCOS NORTE, ILOCOS SUR AND LA UNION.

A narrow strip along the northern portion of the west coast encloses the above named provinces. It is a fertile region, in which extensive crops are raised,

including wheat and other products of the temperate zone. The inhabitants are amongst the most progressive and industrious in the Philippines. Whilst the men are engaged in agriculture, fishing, and raising live stock, which is one of the chief industries of the section, the women are occupied in spinning and weaving various fabrics that find an export market.

There is a highway commencing in the extreme north and following the coast through the entire length of these provinces. It forms a connection with the Manila-Dagupan Railway and is the proposed route of the extension of that line to Laoag, the capital of Ilocos Norte.

The progress of this, one of the most productive districts of Luzon, was prevented by internecine warfare until the Spaniards brought it under subjection in the first half of the nineteenth century. In the past fifty years its population has increased several fold.

BENGUET.

Benguet is to the Americans in Manila what "the hills" are to the English in India. The entire area has an exceptional altitude which gives it a climate similar to that of the northern part of the Temperate Zone. The maximum temperature is $75^{\circ} 2' \text{ F.}$ and the minimum $46^{\circ} 4' \text{ F.}$, giving a mean of $62^{\circ} 6' \text{ F.}$ The scenery is beautiful and the water excellent and abundant. The qualifications of the dis-

strict for a health resort were long since appreciated by the Commission, and it was determined to establish a sanatorium at Baguio. An extension of the railroad from Dagupan will afford ready access to the place.

The crops of the Temperate Zone are successfully cultivated here, and it is believed that the physical conditions are especially favorable to the growth of tea and coffee.

The province is rich in minerals. Copper mines have been profitably worked by natives at Baguio, Tavas, and Sudab. Gold, iron, and coal are also found in different localities.

Oak, narra, molave, and other valuable trees are numerous, besides extensive areas of pine.

PANGASINAN.

This is a well-watered province capable of great development in several directions. The chief products are rice, sugar and wine. The building of boats is an important industry, for which the favorable coast and abundance of suitable wood afford exceptional facilities. Superior physical conditions exist for the cultivation of indigo, chocolate, and coffee, but little attention is paid to these profitable products at present. The Chinese enjoy a practical monopoly of the trade of this province. The Chinese element has been prominent in Pangasinan, Pampanga and Bulacan for two hundred years.

Pangasinan is rich in minerals. Its name is de-

rived from the extensive salt deposits. The Igorrotes of the mountains extract gold and copper by their crude methods. Rich lodes of iron and magnetite in a pure state are known to exist.

The only railroad at present operating in the islands has one of its termini at Dagupan on the Gulf of Lingayen. The road runs through the province of Pangasinan and continues nearly due south to its terminal at Manila, the total length being about 125 miles.

ZAMBALES.

A somewhat backward race with turbulent tendencies inhabits Zambales. Although the industrial condition of the province is not promising, it offers great opportunities for development under more favorable circumstances. The soil is capable of yielding the most desirable crops of the Archipelago. Copper and coal mines are in operation at Agno and near San Isidro. There are indications of iron in the mountains of the north and in those of the south. The forests are unusually rich in valuable woods and gums. Amber is found in large quantities along the coast. This is a commodity which, owing to increasing scarcity, is constantly enhancing in value.

The development of this promising province was for a long time retarded by the periodical inroads of the Moro pirates. During the last century emigration has combined with immunity from disturb-

ance to produce a multiplication of more than sixteen in the population.

BATAAN.

The province is a peninsula forming the eastern boundary of Manila Bay. It is almost entirely covered by mountains. The chief product is rice. Building-wood and ships' timbers are exported to Manila. There are quarries of valuable marbles in the mountains and probably rich mineral deposits.

TARLAC.

Tarlac has good road and river communication between its own towns and those of the neighboring provinces. Rice and sugar-cane are the principal products. There are no mechanical industries with the object of trade. The forests should be a source of great future wealth to the province. They contain large stands of the most valuable trees, including narra, ipil, and molave, and the facilities for lumbering are exceptionally good. The province offers no opportunities for mining, and in this respect it resembles its neighbor, Pampanga.

PAMPANGA.

Pampanga province is in a highly prosperous condition owing to the industry of its people, the fertility of its soil, and the extent of its transportation facilities. It has good road and river communica-

tion and, which is of the greatest importance, it is intersected by the railroad.

The delta of the Pampanga River affords a rich area for the cultivation of rice, with the necessary facilities for irrigation. Rice is the main crop, and it is exported in great quantities.

The forests are disappearing as tillage extends, and the grazing grounds, which formerly afforded occupation to a considerable proportion of the population, are giving out. On the other hand, the fisheries and mechanical industries show a marked development in recent years. There are several hundred stone mills in the province and more than six hundred sugar factories, about one-third of them being worked by steam and hydraulic power.

NUEVA ECIJA.

Nueva Ecija is, thanks to the great productiveness of its soil, a highly prosperous province. Seventy-five miles of the Pampanga run within its boundaries, which also embrace more than forty distinct tributaries of that river. The Pampanga and its branches support a great traffic in the products of this district. There is a network of good roads in the province. The soil is to a considerable extent alluvial and everywhere fertile. It is capable of producing any of the staple crops of the island. In the centre of the province is an extensive depression, subject to inundation. This makes the best possible paddy-land, and is de-

voted chiefly to the raising of rice, which constitutes the principal product of the district. Of this grain over 30,000,000 of quarts are exported annually. Corn is raised in large quantities, and the cultivation of tobacco and sugar receives considerable attention. The central portion of the province contains excellent pasture where the greater part of the cattle for the Manila market is fed.

BULACAN.

Bulacan embraces the greater part of the delta of the Pampanga. It is a highly productive and densely populated district. The entire province, which, with the exception of a small portion on the east, is flat and well-watered, produces rich crops under the careful cultivation of the Tagalog inhabitants.

Coal, iron, and copper exist in abundance and amongst other minerals, gold and silver are found. The mountains are covered with trees of commercial value, including some of the species most prized by the cabinet-maker.

The great vegetable and mineral wealth of Bulacan is supplemented by ample transportation facilities. It has communication with Manila by road, rail, and steamer. Most of the rivers are navigable by the native cargo boats, and good wagon roads connect it with the adjacent provinces.

Bulacan has an extensive industry in the manufacture of fabrics. Its *piña* cloth has a world-wide

reputation. The fibre from which it is produced is extracted from the leaf of the pineapple. It is woven into a very beautiful silk-like textile which commands a high price in the Philippines and is finding favor in Europe.

Bulacan and Pampanga have been prosperous provinces since early times. Father Zuniga, one hundred years ago, found their rivers laden with the produce of the countryside which reached Manila by way of the bay.

RIZAL.

A consolidation of the former province of Manila, excluding the capital city, and the district of Morong, has formed the new province of Rizal. The principal products of the land are rice, sugar-cane, corn, and tobacco. The chief industries are the manufacture of lime, rush mats, and native clothing, and sugar-making, and quarrying. The province has, of course, exceptional facilities for the distribution of its output.

LAGUNA.

The province extends along the east and south shores of Laguna de Bay, from which it derives its name. It has an extensive river system which thoroughly irrigates the whole of its area. The highways of the province are good and it has convenient and economical communication with Manila from various points on the lake *via* the Pasig River.

Laguna is a populous and prosperous province. Its soil and climate favor the growth of all the tropical plants of the Archipelago. An exceptionally large proportion—probably as much as one-fourth—of its land area is under cultivation. The staple products are sugar-cane, rice, corn, cotton, cocoanuts, tobacco, indigo, and various vegetables. Fruits in great variety and quantity are raised and their shipment to Manila constitutes an important element of the trade of Laguna. The raising of live-stock is also an industry of consequence. There are several hundred factories engaged in the extraction of oil and the distillation of wine from the cocoanut. Amongst other industries, the manufacture of *bolos* and of furniture deserve mention.

Laguna has no considerable endowment of mineral or forest resources, but its busy population will always find ample scope for their industry in agricultural pursuits.

CAVITE.

Cavite gains a great deal of importance from the fact that its capital, the town of the same name, is the naval headquarters of the Philippines. The inlet upon which it stands affords the best anchorage in the Bay of Manila and is the refuge of ships during severe storms.

The province has a frontage of thirty miles along the bay. The inhabitants of the littoral are engaged

in the extensive cultivation of rice, in fisheries, and in the manufacture of salt. The output of all these industries is exported to Manila. Rice and sugar are extensively grown in the interior, where pastoral pursuits also engage a large number of the people.

BATANGAS.

Batangas has three or four excellent harbors and a good system of roads, many of which, however, are, owing to the preponderance of clay in the soil, impassable for wagons in the rainy season. The province contains more towns of a considerable population than any other province in the islands. This district is one of the most fertile and well-developed in Luzon. The output of coffee and sugar is very large. Rice, hemp, chocolate, and other products of agriculture help to swell an important export trade. Live stock is also raised extensively, the Batangas breed of horses being widely celebrated. At various points in the province are mineral springs whose waters have remarkable curative properties and are found to be efficacious in a great variety of diseases.

Abundance of commercial timber stands in the mountainous districts, and the facilities for marketing it are unusually good. This is but one of several fields which Batangas offers for the profitable investment of capital.

The population—almost entirely Tagalog—is civilized, progressive, and industrious. Every hut con-

tains one or two looms, from which the women turn off a variety of fabrics of the finest texture and the brightest hues.

TAYABAS.

By act of the Philippine Commission, 1902, the long and narrow strip along the east coast composing the districts of Principe and Infanta, and including the island of Polillo, was annexed to, and incorporated with, the province of Tayabas. The attached region is in great part mountainous wilderness, extensive portions, particularly in Principe, being impenetrable. Its meagre population—averaging about one to the square mile—consisting of wild or semi-civilized tribes, subsist mainly by fishing and hunting. In the vicinity of the five or six small towns agriculture of a primitive sort occupies a few of the inhabitants. The people of this region have made no increase in numbers and hardly any progress toward civilization in the centuries which have elapsed since the Spaniards first landed upon Luzon. The earliest accounts of this Pacific coast and its inhabitants might almost serve for a description of to-day. Coal is found in the Island of Polillo, but owing to the difficulties of transportation it is not mined. The forests abound in a variety of timber of economic value, and there is good ground for the belief that the mountains are rich in mineral deposits, but the difficulty of marketing any products will

prove a hindrance to the development of the district for many years to come.

Tayabas proper has a very mountainous surface. Its coast-line affords good anchorage at several points, and the province is in water communication with all the ports of the Archipelago.

Tayabas is traversed by the great highway and telegraph line which, commencing at Sorsogon in the southeast of Luzon, passes through the provincial capitals, Albay, Nueva Caceres, Lucena, Santa Cruz, and so to Manila.

Notwithstanding the rugged character of its area, Tayabas affords its inhabitants ample opportunity for the pursuit of agriculture. The mountain ranges slope to the coast in well-watered terraces, whose fertile soil yields large crops of rice, sugar cane, and coffee. Lumbang is a specialty of the district. It is a seed from which a peculiarly oleaginous substance is obtained.

The forests contain a great variety of useful hardwoods as well as wax, gums, and resinous substances, in which there is an important export trade to foreign countries.

Indications of coal have been marked in various parts of the province. The island of Alabat, off the north coast, contains veins of excellent coal in the vicinity of Sanguinin on its northwest side. The facilities for shipping should make mining at this spot an attractive proposition.

The people manufacture a great variety of useful articles for export and several kinds of native fabrics. The towns along the shore of Tayabas Bay have boat-building yards from which *cascos*, *paraos*, and other kinds of native craft are turned out.

AMBOS CAMARINES.

Ambos Camarines has several fine roads connecting the principal towns and marts of commerce. The projected new railroad system of the Philippines includes a line to run from Nueva Caceres, the capital of the province, to the town of Albay, with a branch from each point to the coast. Within a radius of ten miles from the capital are eleven towns of importance, between which communication is maintained by means of excellent highways. The Bicol River, by reason of its superior navigability, is one of the most important inland waterways of Luzon. Steamers drawing eleven feet may go up to Nueva Caceres, twenty-five miles from the ocean. Steam vessels of the lightest draft may go as far as the head of Lake Bato, seventy miles from the mouth, whilst, at certain seasons, native boats can penetrate to Polangui, in the province of Albay.

Ambos Camarines contains extensive areas of fertile land, from which are produced an excellent quality of rice, chocolate superior to that of the Moluccas, and sugar cane. The peninsula south of and including this province is one of the principal hemp dis-

tricts of the Archipelago. Large quantities of the fibre are exported from Ambos Camarines, whilst a considerable amount is consumed by the local looms, which convert it into *sinamay* and *guímaras*.

A variety of mechanical industries afford employment to a large proportion of the inhabitants. There are numerous sugar mills, hemp presses, refineries, and distilleries, besides the factories of metal workers and tool makers.

The forests are particularly rich in woods of great utility, and the by-products, such as resin, pitch, and wax, are numerous and abundant.

Ambos Camarines is regarded as one of the most important auriferous regions in the Philippines. Gold, silver, iron, lead, and copper are worked on the north coast. Mr. Drasche, a well-known German geologist, has reported rich quartz veins at Mambulao, which, at the time of his inspection, in 1875, were being worked by seven hundred natives. At Paracale there are parallel quartz veins in granite, one twenty feet in width, the ore from which assays thirty-eight ounces to the ton. Quicksilver is found at Isarog and coal near Caramuan. In the vicinity of Daet, on the northern coast, are several gold mines. Near Sogod is an extensive layer of coal similar to the Australian product. In the southern part of the province there are mines of pit coal and quarries of marble and gypsum.

The continuation of the peninsula to the south forms the province of Albay. In general the district is rugged and volcanic. Near its east coast Mayon rises in solitary beauty from an extensive plain. Albay has numerous waterways and good roads forming connections between all the important towns and villages. Legaspi and Tabaco are ports of entry from which the immense hemp output of the province is shipped to Manila. An idea of the extent of this trade may be conveyed by the statement that at Legaspi alone \$1,000,000 changes hands every thirty days. The surface of Albay is admirably adapted to the cultivation of hemp, or *abacá*, as it is called in the islands. The plant thrives on mountainous slopes where it may get plenty of moisture with good drainage, ample shade, and a fertile soil. Albay contributes about one-fourth of the total hemp export of the Philippines, the value of which in the last twelve years has averaged upwards of \$18,000,000. In addition, a considerable quantity of the product is devoted to home consumption in the manufacture of fabrics, cordage, etc.

PROSPERITY OF ALBAY.

The production of oil from the cocoanut is an important industry.

As an index to the prosperity of Albay and the two contiguous provinces it may be stated that their population has increased more than seventeenfold in

the past two hundred and fifty years. The hemp trade has been a predominating factor in this increase.

Native boats, including sails, rigging, etc., are made in the coast towns. A great number of the craft are engaged in the coastwise trade, carrying hemp from the numerous villages along the shore to the sea-ports, where it is baled and shipped.

Coal mining is carried on to a considerable extent, and there are indications of gold, silver, and iron in commercial quantities amongst the summits of the eastern coast-range.

The forests contain great stands of valuable trees, but they may be only sparingly felled, since extensive shade is essential to the successful cultivation of the hemp plant.

SORSOGON.

Sorsogon, the southernmost district of Luzon, is particularly favored in the matter of good harbors. That in which the port of Sorsogon stands is one of the best in the Archipelago. The shores of this gulf are well cultivated and populous, and a large traffic is carried on by water between its towns.

The population of the province is largely engaged in the hemp industry, and in the production of copra, the dried meat of the cocoanut, from which the oil is expressed. Both of these commodities are shipped in great quantities.

The presence of abandoned mines of gold, silver,

iron, and coal, indicate extensive workings in former times, and it is believed that the operations might be resumed with profit.

RAILROAD EXTENSION.

The commercial development of the Archipelago and the general welfare of its people will be greatly advanced by the extensive railroad system, for the construction and operation of which contracts were made by the Philippine Commission in 1905. The immediate effect will be to double, and treble, the commerce of certain sections where almost limitless products need only transportation facilities to find ready markets.

In Luzon it is proposed to extend the Manila-Dagupan line northward along the coast to Laoag. A branch will run from San Fabian, near Dagupan, to Baguio, the capital of Benguet province, and the site of the government sanatorium. Southward from Manila the line will be prolonged to the town of Batangas. This extension will skirt the west shore of Laguna de Bay, and a branch will continue round the southern end of the lake to Santa Cruz. Another branch will connect Lipa, Batangas province, with Lucena, on Tayabas Bay.

The portion of the system destined to traverse the hemp belt of the southeastern peninsula has already been mentioned.

MARINDUQUE.

Marinduque, although less than seven hundred square miles in extent, is an island of considerable commercial importance. It is almost circular in shape and has the prevailing mountainous characteristics. The greater part of its population of about 50,000 Tagalogs is found in the towns, of which Boac, the capital, is the largest and most important in every respect. The island has a large export trade, especially in rice, copra, and hemp. Marinduque has excellent facilities for stock raising, and that industry is pursued to a moderate extent. The island is distant only ten miles from the mainland of Luzon.

THE ISLAND OF MINDORO.

Mindoro lies immediately south of the province of Batangas. It is one hundred miles long by sixty at its broadest part, and has an area of about 3,500 square miles. Its mountain range runs through the middle of the island and traverses its entire length. In Mt. Halcon the range attains an elevation of 8,800 feet. The island is, for the most part, covered with forests of useful trees. The valleys, copiously watered by exceptionally great rainfall and numerous streams, contain extensive stretches of the best kind of grazing land. The central portion of the island is a large plain of this description. There are a few civilized settlements on the coast, but the inland districts are

inhabited by the wild tribe of Manguianes, or "savage mountaineers."

Mindoro has extensive stretches of highly fertile coast land that are unoccupied save for a little hamlet here and there. This is due to the fact that during many generations the island was ravaged by the Moro pirates, who at the beginning of the nineteenth century had almost depopulated it.

THE VISAYAN GROUP—MASBATE.

Masbate, with its dependent islands, form the northernmost province of the Visayas. The island occupies a position in the latitudinal center of the Archipelago, and about eighty miles east of the axis of longitude. The surface of Masbate is very broken and mountainous, but in the west and southeast portions there are extensive and well-watered grazing grounds. There are several good harbors and a number of streams of considerable size.

The staple products are cotton, chocolate, sugarcane and hemp. The island has long been famous for its herds of cattle and for its horses and hogs. The grazing industry has increased largely since the American occupation, but Masbate, like almost every other island of the Archipelago, suffered severely from the recent visitation of rinderpest. Normally the island will ship in the course of a year from twelve to fifteen thousand head of cattle to Manila, besides supplying other parts of Luzon and Negros with

numerous *carabao*. , An important industry is the manufacture of sugar sacks and palm mats for export. Numbers of the inhabitants are engaged in collecting the by-products of the forests, in fishing, hunting, and weaving. A fine quality of lignite is found upon the island, and gold is washed from the sands of the rivers.

SAMAR.

Samar, the chief of the Visayan Group, is the third in size of the islands of the Archipelago, having an area of 5,000 square miles. It lies about ten miles off Sorsogon, from which it is separated by the Strait of San Bernardino. The island has a very irregular surface, but there are no great elevations. The coast line is extremely broken and is fringed with islets and reefs, making approach difficult, especially upon the eastern side. Samar has several rivers of considerable length, but they are all very shallow and beset with rocky obstructions, so that navigation is limited to native boats. In connection with the present railway improvements, a line will be constructed to cross the island from Paranas, about midway of the west coast, to San Julian, almost directly opposite, upon the east coast. Physical and climatic conditions in Samar are favorable to the production of all the staple crops of the Archipelago. The output of hemp, sugar, rice, and copra is very large. The island is said to be rich in coal and other minerals, but the

hostility of the natives in the interior has hitherto been a bar to satisfactory exploration.

LEYTE.

Leyte belongs to the Visayas and is situated to the southwest of Samar, from which it is separated by less than half a mile of water. Its length is one hundred and twenty miles and its utmost breadth fifty miles. The greater part of the island is broken up by groups of mountains and volcanic cones. One continuous range of hills traverses its entire length. Leyte has several fine bays and harbors, and three or four rivers of commercial consequence, including the Binahaan, which permits of *cascos* going up to Dagami, an important town, fifteen miles from the coast.

The railroad is planned to extend from Tacloban, on the northeast coast, to Casigara, upon the bay of that name; in a southerly direction the line will run from Tacloban to the town of Abuyog.

The population of about 300,000 consists of Visayans almost exclusively, and their language is the current dialect. Leyte is one of the most highly cultivated of the Philippine Islands. The chief product is hemp, of which the quality is excellent. Sugar and live stock are important exports from the island.

BOHOL.

Bohol, of the Visayas, lies between Leyte and Cebu. It has a length from east to west of about sixty miles

and a breadth of about forty miles. Nowhere are there any great elevations. The southern half of the island is hilly, but in the north the land is level, or undulating, seldom reaching a height of one thousand feet. The outline of Bohol is unusually simple, but the northern and eastern coasts are rendered difficult of approach by reefs. The island is without a harbor of consequence. There are four or five rivers in Bohol that are navigable by large native cargo boats. The population is notable for its industry. The soil is not particularly favorable to agriculture, but a large quantity of vegetable produce is raised by careful tillage. The chief mechanical industries are the weaving of textiles from cotton and pineapple fibre.

CEBU.

Cebu occupies a central position amongst the southern members of the Visayan Islands. It is a narrow strip of land, one hundred and forty miles in length, lying between Bohol and Negros. The Cordillera Central range of mountains runs the entire length of the island and bisects it in almost equal parts. Whilst this range nowhere attains an altitude much in excess of two thousand feet, it is difficult of passage and forms a serious obstacle to communication between the coasts. Its entire length only affords about half a dozen easy cross routes.

Cebu has no navigable rivers. Its appropriation



in the new railroad system contemplates a line running north from the city of Cebu to Danao on the east coast, and south from Cebu to Argao on the same coast. In addition there may be constructed a line across the island from Carcar, or Sibonga, to the west coast, and thence along the coast between Dumanjug and Barili.

The province, which embraces a few small adjacent islands, is the most populous in the Archipelago, having 600,000 inhabitants: that is, 337 to the square mile, a density unapproached by any other of the Philippine Islands, which have an average of sixty-seven to the square mile. The city and port of Cebu has an excellent harbor. It is, next to Manila and Iloilo, the largest municipality in the islands. Cebu exports hemp, sugar, and copra in large quantities and raises a great deal of rice, mainly for local consumption. The principal manufactures are sugar, salt, pottery, sacks, and various fibre fabrics.

NEGROS.

Negros, one of the Visayas, is situated between Cebu and Panay. It is nearly as large as Samar and in form somewhat resembles Leyte. A continuous mountain range, embracing several peaks exceeding six thousand feet in height, traverses the island from end to end. Negros is almost entirely encircled by a broad belt of coast land, which is particularly well adapted to sugar raising. This is the

principal seat of that industry in the Philippines. It has been carried on here for forty years. Steam and hydraulic machinery is used in the process of extraction. The fisheries are an important element in the industries of the island.

Negros is deficient of good harbors, and most of its rivers are navigable only by *lorchas*, but the Pasig and Danao admit vessels drawing ten feet of water to a distance of ten miles from their mouths. The railroad will run from the harbor of Escalante, on the northeast coast, westerly, following the coast line to Himamailan.

· PANAY.

Panay, the westernmost island of the Visayan group, has the shape of a rough isosceles triangle with its apex pointing in a southwesterly direction. Its equilateral lengths are one hundred miles and its base seventy-five miles. In area it is not far short of Negros and Samar. A range of mountains runs along the entire west coast and, from a point about midway, throws out a spur which traverses the island, terminating in the northeast corner. The eastern half of Panay contains large reaches of level and fertile land, intersected by numerous streams. None of the rivers of the island will accommodate any but the lightest craft. There are, however, many fine roads running coastwise between important trade centers, but, owing to the difficulty of crossing the moun-

tains in the interior, communication between the provinces is carried on solely by sea. Panay is one of the most populous of all the islands, its inhabitants numbering in the neighborhood of 800,000. It has several large towns and three important cities, namely, Antique, Capiz and Iloilo. The last ranks next to Manila amongst the commercial centers of the Philippines. It has a good harbor, and vessels drawing fifteen feet of water may safely approach the city at all seasons. The staple products are sugar-cane, rice, and copra. In 1892 the shipments of sugar from this island aggregated the enormous amount of 354,934,482 pounds. In recent years the production has fallen off more than fifty per cent., owing mainly to a decreased foreign demand.

A large portion of Panay is exceptionally fine grass-land, on which live stock, chiefly carabao, is raised in large numbers. The horses of Iloilo are famed throughout the islands and are in constant demand.

The mechanical industries are important. The exports include the best quality of *piña* cloth, silk, cotton, hemp and other fabrics. The province of Antique in particular is celebrated for the quality and quantity of its textile manufactures, which give employment at the looms to upwards of twelve thousand women. Panay was noted for its beautiful homespun fabrics one hundred years and more ago.

The projected railway will consist of a line running

in a northeasterly direction from Iloilo and forking to the towns of Capiz and Bataan.

The island has exceptionally great mineral resources, but they have not been scientifically worked. Deposits of quicksilver, gold, iron, and copper, are known to exist. There are indications of coal in several localities. Fine marbles, and a beautiful variety of tonalite, are quarried. Veins of gypsum and marl have been located, and petroleum and natural gas are reported.

PARAGUA.

Paragua, or Palawan, stretches 275 miles northwest and southwest with a maximum width of twenty-five miles. It is inhabited almost entirely by wild tribes. It has no trade of consequence and hardly a town worthy of the name. The industries consist mainly of stock-raising and weaving of cloth for local use. The island contains a fair proportion of fertile land and some good grazing grounds. The forests abound in very valuable woods, and the physical conditions would be favorable to lumber operations by improved methods.

MINDANAO.

Mindanao approximates to Luzon in size, but with a greatly differing shape. The surface formation of the island is very irregular and diversified. A range of mountains skirts the whole of the east coast. Min-

danao, like Luzon, contains two large valleys. That of the Agusan lies to the west of the eastern mountain range, from which the great Agusan river receives its supplies as it flows northward over a course of 240 miles to its mouth in Butuan Bay. Vessels with a six-foot draft may navigate the Agusan to a distance of twenty miles from its outlet, and light native craft go much farther. The river has several strong tributaries, some of which are of great utility to the natives as channels of traffic. The Agusan in its upper course drains Lake Lanao, the surface of which is 2,200 feet above sea level. On the south its shore rises abruptly to a plateau nearly one thousand feet above the lake. Several detached extinct volcanoes rise to heights varying from one to two thousand feet above the plateau. The lake is almost surrounded by mountains. The valley of the Agusan has a breadth of from forty to fifty miles, and is bounded on the west by a succession of ranges traversing the entire length of the island through its center and dividing its two great plains. These ranges are frequently broken, presenting many low and easy passes.

The Rio Grande de Mindanao is the first river in length of the Archipelago. It rises in the northern part of the island, and after passing through the valley, to which it gives its name, discharges into the Bay of Illana, distant three hundred miles from its headwaters. It is navigable for small steamers as far as Lake Liguasan, a distance of about thirty

miles, and for boats drawing three and a half feet of water for fifteen miles higher. By blasting the rocks with which its bed is beset, a much more extensive channel would be freed to commerce. With the development of the island such an undertaking may prove of economic advantage, for the course of the stream is through a region rich in forest products, including rubber and gutta percha.

The coast of Mindanao is not intricately indented like those of most of the Philippine Islands. Although it has several large bays, penetrating far inland, there are few good harbors.

A range of mountains hugs the southern shores of the Zamboanga peninsula, and is continued in detached spurs along the coast to the Gulf of Davao. About thirty miles to the west of the port of Davao stands Apo volcano, the highest peak in the Archipelago. Its summit rises 10,311 feet above the level of the sea. "Looking at the volcano from Davao, or Samal, on a cloudless morning, there may be seen distinctly a wide space with small cones of sulphur, from which burst forth intermittent eruptions of white sulphurous vapors. This is a magnificent spectacle when, at sunrise, the sulphur mantle and cones are shining, and there then appears a sudden jet of vapors sometimes growing and growing until the white, fine cloud covers the whole spot, and even the summit of the volcano. Though Apo is well known to be active, there is no record of its eruptions.

The Apo volcano-seismic center is one of the most active of the Archipelago; small seismic shocks are felt weekly if not daily; very often a rumbling sound precedes the stronger shocks."

With the exception of Mindoro and Paragua, Mindanao is the most sparsely settled of all the principal islands. It has a population of about half a million, which gives only about fourteen to the square mile. The towns are mainly situated upon the coast, and the banks of the larger rivers and great inland lakes. A considerable portion of Mindanao is *terra incognita*, and it is believed that extensive areas are practically uninhabited.

Development might transform Mindanao into one of the wealthiest islands of the Archipelago. There is reason to believe that it contains rich deposits of gold and other valuable minerals. Its forests abound in the most desirable hardwoods, and its vegetable products only need exploitation to exceed those of any other island in the Philippines. Mindanao has the peculiar advantage of producing spices of several varieties and in great quantities. Live stock is raised extensively, but the production of chief commercial value is hemp, in the output of which the island ranks fifth amongst the various hemp sections of the Archipelago. Except in a limited way, for local purposes, the mechanical industries are not prosecuted in Mindanao.

SULU.

Sulu, or Jolo, is the chief island of the group of that name. It lies to the southwest of Mindanao. Sulu has a commercial and political importance quite incommensurate with its insignificant area. The scenery of the island is extremely beautiful, and it has a splendid climate. The soil is highly fertile and the greater proportion of the inhabitants are engaged in agriculture. There is a large extent of virgin forest composed mainly of trees of commercial value. There is some trade in the shipment of choice cabinet woods, but the chief exports are oyster pearls and mother-of-pearl shell.

TAWI TAWI.

This group of more than one hundred and fifty islands has an aggregate area of only 358 square miles. The principal island, Tawi Tawi, is 232 square miles in extent. The group forms part of the Sulu Archipelago. After the treaty of cession of the Philippine Islands had been made it was discovered that these islands lay six miles beyond the boundary limits. They were acquired by special convention and the payment of an extra gratuity to Spain.

The inhabitants number less than twelve hundred. They are Moros, with no industries other than those of the simplest domestic character. During many centuries these islands have been a favorite resort of Malayan pirates.

The fauna of the Philippines, whilst in general resembling that of the neighboring Malayan islands, shows some marked differences from them. Borneo and Java have many more species than are to be found in the Philippines, which have but three representatives of the carnivora, but six species of deer, and only two of the monkey tribe. Rodents are scarce, but there are at least thirty varieties of bats.

ANIMAL LIFE.

The *carabao*, few of which remain in a wild state, and the *timarau*, or antelope buffalo, are the only large mammals. The distribution of the fauna of the Archipelago is very remarkable. There are numerous species of animals which are found only in restricted localities. The *timarau* is peculiar to Mindoro. Porcupines are known only in Paragua and the Calamianes Islands. These two divisions also possess a number of birds which are not to be found elsewhere in the Philippines, although they are similar to Borneon species. The island of Balabac is the habitat of a curious animal little larger than a cat, but which in form is exactly like a doe.* Luzon contains 286 species of birds, 51 of which are not known in any other island. In Cebu, despite its proximity to Bohol on one side and to Negros on the

* The *Tragulid Ranchil*. It is also found in Malacca and in Cochin China. Vide, *Lucon et Palaouah*, par Alfred Marche, Paris, 1887.

other, there are nine species of birds not found elsewhere. Upwards of three hundred species of land birds exist in the Philippines. These include such game birds as duck, geese, snipe, plover, and quail.

Crocodiles, snakes, and lizards are numerous and widely distributed. There is a small, chirping lizard which makes its home in the walls of houses and is regarded with a sort of superstitious favor by the natives. Pythons are to be found in many localities and are said to attain a length of forty feet.

Whilst there are a great variety of insects, some of them exceedingly beautiful, insect life is not abundant numerically. There are comparatively few house flies, and, except about the marshy coast lands, mosquitoes are nothing like the pest they become in most East Indian countries.

The waters of the Archipelago harbor abundance of fish of various species, which form an important factor in the domestic economy of the natives.

FLORA.

In general the flora resemble those of Borneo, Sumatra, and Java. The principal features of the flora in their commercial aspects will be described elsewhere in connection with commerce and agriculture. The forests of the Archipelago are of enormous extent and their product of incalculable value. Under conservative regulations, if these are not made so stringent as to discourage the investment of capital

in lumber operations, the products of the forests should prove to be one of the chief factors in the prosperity of the country. The Philippine Forestry Bureau reports 750 different kinds of wood brought to market during the year 1902, but this is probably far from representing the number of species available for industrial purposes and domestic use under favorable conditions of operation. Under the Spaniards no scientific exploration of the forests was attempted. For some time past the Insular Forestry Bureau, under Captain G. P. Ahern, has been engaged in a systematic survey of the forest lands and a careful examination of species by experts. Climatic and other considerations are such that but for the interference of man these islands would be practically covered with trees, even up to the higher slopes of the mountains. As it is, two-thirds of the area of the Archipelago is occupied by almost virgin forest, the cleared regions being in the main centers of population, such as the coast districts and the great valleys of Luzon and Mindanao.

VEGETABLE PRODUCTS OF COMMERCIAL VALUE.

The principal vegetable products, in the order of their commercial importance, are *abacá* (hemp), tobacco, sugar, copra, coffee, and rice.

The chief hemp districts are the southeastern provinces of Luzon, the islands of Catanduanes, Samar, and Leyte. *Abacá* is practically a monopoly of the Philip-

pinos, for despite several efforts in different regions, this plant has not been successfully grown elsewhere.

The main tobacco district is the valley of the Cagayan, in which an excellent variety of leaf is raised. It is believed by connoisseurs, familiar with the Cuban product, that with improved methods of cultivation, curing, etc., the Philippine leaf would compare favorably with any in the world, excepting, perhaps, the output of the Vuelta Abajo district of Cuba. Upwards of 20,000,000 pounds of leaf are shipped annually, most of it to Spain, and over 100,000,000 cigars. These go chiefly to China, Japan, and the East Indies.

Sugar is produced in many provinces, but particularly in Pampanga, of Luzon, and the island of Negros. The cane is raised in a very haphazard fashion, and the greater part of the product is extracted by the crudest methods. Nevertheless, the export averages about 200,000,000 pounds a year. The possibilities for an extension of this trade under more favorable conditions are very great.

Copra, the dried kernel of the cocoanut, is shipped in large quantities to France and other countries, where oil is expressed from it. Probably there is no vegetable product in the island the cultivation of which might be developed with greater profit. It is one of the few products which enjoy a commercial demand constantly equal to the entire supply. At present the industry is carried on in the most waste-

ful and unintelligent manner and profits are allowed to accrue to the foreign manufacturer which should be retained by the cultivator.

Coffee is grown in the provinces of Batangas, Laguna, Tayabas, and Cavite, of Luzon, and in parts of Mindanao. The Philippine article compares favorably with the products of Mocha and Java. At one time the annual crop amounted to about 14,000,000 pounds, but in recent years it has greatly diminished, owing to the destruction of the plants by a parasitic insect.

Palay, or rice, of a good quality may be raised in most of the provinces of the islands. It is the chief food of the natives, who annually consume a quantity greatly in excess of what is produced in the islands. The fact has not necessarily an unfavorable economic significance. In many districts, as for instance in the hemp provinces, the inhabitants can devote their land and energies to the production of a more valuable crop. Still, it cannot be denied that the Philippines should import less and raise more of this staple. There was a time when rice was a great article of export from Manila.

The other vegetable products of note are chocolate, corn, wheat, indigo, sesame, peanuts, and many varieties of garden vegetables.

In Mindanao and Paragua cinnamon, nutmegs, cloves, mace and other spices grow, and there is a large field for the extension of their cultivation.

The tea plant thrives in certain localities, and it is believed that the camphor tree might be introduced with success.

MINERALS.

There can be no doubt about the mineral wealth of the Philippines. It is probable that each island, and indeed almost every province, has rich deposits of one kind or another. Mining operations have never been sufficiently extensive to afford a satisfactory criterion of the profitability of that industry. There is sound ground, however, for the belief that with the increased working and transportation facilities that will soon be available the development of the mineral resources of the islands will yield large returns to investors.

Coal in varying quality, from excellent to worthless, underlies a great part of the islands, deposits having been discovered in many provinces. Gold is distributed over a large area and in some sections it has been worked from prehistoric times. It was doubtless exchanged with the earliest traders, for the Chinese had a tradition that a mountain of the precious metal existed in Luzon. Rich veins of copper have been discovered and worked to a very limited extent and in a primitive fashion. Iron is abundant on several of the islands, and natives have worked it in a crude manner into ploughshares and other implements. Lead, silver and other valuable metals are known to exist in

various widely-distributed localities, but the scientific exploration of the mineral resources is only just beginning under the direction of the United States Geological Survey and that of the Mining Bureau of the Philippine government.

CLIMATE.

The entire Philippine Archipelago lies within the Torrid Zone. Its climate therefore is in general tropical, but there are portions of the island to which the statement cannot be strictly applied. Not only are there great climatic differences amongst the various islands, but in those of the larger class the climatological conditions of the eastern coasts are distinctly different from those in the interior and on the western coasts of the same islands. Such is the case in Luzon, Samar, Leyte, Mindanao, Panay, and Mindoro—more particularly in the last three—and other islands whose greatest length similarly extends from east to west.

The year is popularly divided into three seasons: (1) November, December, January, and February, when it is dry and temperate, the monthly mean temperature oscillating between 25 C. and 26.5 C.; (2) March, April, May, and June, the hottest period of the year, the monthly mean ranging from 27.5 C. to 28.5 C.; (3) July, August, September, and October, which is an intermediate period, the mean fluctuating between 26.5 C. and 27.5 C.

The climate is a perpetual summer, with a temperature varying but little. There is a great deal of humidity, stimulating to vegetable life, but enervating to human beings. It rains on an average two hundred days in the year. The mean heat in Luzon is about 81° Fahrenheit. The rainy season lasts for about six months, beginning the middle of April in the greater part of the islands, but on the coasts washed by the Pacific, the order of the wet and dry seasons is reversed. In general the hottest period is during the months of March, April, and May, except on the Pacific littoral, where the greatest heat is experienced during June, July, and August.

The thermal map of the Archipelago supports the following classification, omitting notice of localities which are necessarily affected by unusual altitude:

First. Regions of high temperature. The great valley of the Cagayan; the west coast as far south as the Bay of Manila; the plains of Pangasinan; the eastern portion of Tarlac and the western part of Nueva Ecija; the lowlands of Pampanga and Bulacan; the northern coast of Tayabas and Ambos Camarines; the entire southeastern peninsula, with the exception of Sorsogon; the northern part of the Island of Panay.

Second. Regions of intermediate temperature. That portion of the province of Pampanga that borders upon Zambales, and Bataan; the uplands of Bulacan; the province of Rizal; the northern and eastern

sections of Bataan; Manila, and its eastern vicinage; the west coasts of Samar, Negros, Panay, and Bohol; the island of Cebu, and the peninsula of Zamboanga.

Third. Regions of mild temperature. The east coast of the province of Sorsogon; the greater part of the eastern Visayas (Samar, Leyte and the adjacent islands); the peninsula of Surigao; the east coast of Mindanao; the entire Sulu Archipelago.

THE INHABITANTS.

II.

THE INHABITANTS.

Negrito Characteristics—The Malays at Home—Malay Invasion of the Philippines—Early Malay Occupation—Legaspi's Opinion of the Natives—Modern Estimates of the Filipino—An Effort to Reconcile Differences of Opinion—The Non-Christian Malays—The Moros—The Growth of Population.

The aborigines of these islands are the Negritos, or Aetas, of the mountains, who, under various local designations, are found widely scattered over the Archipelago to the number of about 30,000. Doctor Barrows says: "The origin of these little people is unsolved, but even in historic times we know that they were more widely distributed, if not more numerous, than now, and the occurrence of the same little type in the Malay Peninsula and on the Andaman Islands in the Indian Ocean leads to the inference that they were once in perhaps even continuous occupation of the Malay Archipelago and the adjacent mainland from the Andaman Islands to the Philippines." Their resemblance to the Papuans has suggested the theory that New Guinea was their original habitat, but there is no substantial data to support the surmise. The Negritos are completely savage, and almost as isolated to-day as they were centuries ago.

They are much darker than the natives of Malayan descent, and many of them are quite black. They do not exhibit the Negroid cranial formation, but have the same cast of features, with "kinky" hair. They are pygmies—the average height of their men being about fifty-six inches—ill-formed and unmuscular, but supple and agile. Their intelligence is low.

NEGRITO CHARACTERISTICS.

They are deficient in courage and apparently have few attractive characteristics. All attempts at civilizing them, collectively or individually, have failed, although in a few instances they have been domesticated. They live in small communities, subsisting on fish, roots, and such vegetables as may be raised with the least effort. Their utmost agricultural achievement consists in scratching the earth and casting seed, without taking the trouble to clear the ground. Their manner of life is characterized by makeshift methods consistent with their nomadic tendencies. They do not build houses, but for shelter use a kind of lean-to, made of cane and matted leaves. Not infrequently they make raids into the plains and carry off the cattle of their more civilized neighbors. The costume of the men is restricted to an irreducible minimum of covering; that of the women consists, at most, of a string of beads and a loose cloth tied round the waist and reaching to the knees. The weapons of the Negritos are a bamboo spear, a club,

and a bow, with sometimes poisoned arrows. Their religion, like that of all primitive people who live in forests and mountains, includes a belief in spirits, who take an active interest in the affairs of men, and the adoration of such natural phenomena as excite their wonder or apprehension. The moon is their principal deity. They have a great respect for old age and an awesome reverence for death. The Negrito is not originally, nor by natural inclination, a hill-man. The advance of civilization has forced him into the fastnesses of the mountains. The earliest Malay immigrants found him in undivided possession of the land. The newcomers, until their numbers became great enough for resistance, lived in vassalage to the Negritos and, at as late a period as that of the arrival of the Spaniards, there were communities of Tagalogs in Luzon paying tribute to the aboriginal inhabitants.

Pure-blooded Negritos still exist in different sections, but their number is believed to be decreasing. Their mixture with the Malayan natives has generally resulted in an advance in mental and physical development.

There are several hybrid races sprung from union of Malays and Negritos. The most notable of these in Luzon are the Dumagas. They occupy the country lying east of the Sierra Madre. The Dumagas who live in the vicinity of Christian villages are slightly removed from the savage state.

The Mangyans, a Negrito-Visayan race, occupy nearly the entire interior of Mindoro Island and parts of Paragua. They engage in a primitive form of agriculture and collect forest produce, which is bartered with the Christians. These people have made a considerable advance from the state of the aborigines. Worcester, who appears to have been much impressed by the morality of the Mangyans, devotes a considerable portion of his book to a description of their customs, etc.*

Doctor David P. Barrows, Chief of the Philippines Bureau of non-Christian Tribes, believes that, with the exception of the Negritos, all the tribes of the islands, whether Christian, Muhammadan, or pagan, are derived from the Malayan race. "We probably have," he says, "in these tribes, two types, which represent an earlier and a later wave of immigration, but all came from the south, all speak languages belonging to one common stock, and all are closely related in physical type and qualities of mind. As representative of the first migratory movement may be named the Igorot, the mountain head-hunters of Northern Luzon, and of the latter almost any of the present Christian, or Muhammadan tribes. The migratory period of this latter type is almost covered by the historical accounts of the exploration and settlement of the Far East."

*The Philippine Islands. Dean C. Worcester. New York, 1899.

MANILA CATHEDRAL.

This stately cruciform building is the most beautiful structure in Manila. In the foreground is a caromata, with Philippine "poncy" and native hackman.

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The Portuguese adventurers, who were first, of all white men, to reach Asia by sea, found the territory we call the Malay Peninsula and Archipelago inhabited by a people of Mongolian origin, who styled themselves Malayu. They were short of stature, of a brown color, with black hair and prominent facial bones. They engaged in agriculture, had some trade, and displayed a tendency to seafaring.

THE MALAYS AT HOME.

A thousand years before the arrival of the Portuguese the Archipelago had been invaded by the Hindus, who subjugated some of the islands and established in them the Brahmin religion. Traces of this Hindu occupation are to be found at the present day in the ruins of temples upon the island of Java.

Later, the Arabs began to trade in this region and, following their invariable custom of proselyting wherever they went, converted large numbers of the inhabitants, and particularly the dwellers along the seaboard, to Islam. Before the advent of the Europeans, Muhammadanism had completely supplanted Brahmanism, but the influence of the Hindu occupation upon the language of the people is traceable to-day in the great proportion of words of Sanskrit origin, and there is every reason to believe that the Malays owe a considerable advance toward civilization to the Hindu invasion.

Sometime about the end of the thirteenth, or the

beginning of the fourteenth, century these Muhammadan "Sea Folk," as the inhabitants of the Malay Archipelago were called, made a settlement in the northwest section of Borneo, which was already peopled by tribes of Malayan origin in a low state of development. From Borneo the Orang Salat (Sea Folk) advanced to the Sulu Archipelago and thence to Mindanao, to Mindoro, and the shore around Manila Bay.

MALAY INVASION OF THE PHILIPPINES.

The Muhammadan invaders found upon the islands, besides the Negrito aborigines, another race of the same physical type as themselves and speaking a language which had the same root as their own. These were the descendants of an earlier, or perhaps of more than one, tide of Malay immigration. They occupied a much lower grade in the scale of culture than did their Muhammadan kinsmen. They painted and tattooed their bodies and lived in nest-like houses in the trees. They were pagans and ate dog meat.

At the beginning of the sixteenth century the Negritos were still a very numerous element in the population of the Philippines. The wild tribes of Malayan origin probably predominated over them in the Visayas and some of the southern islands. The Muhammadans were as yet numerically weak, but the tide of their immigration had fairly set in and they

began from this time to come into the country in constantly increasing numbers. A boatload of these newcomers were the first natives with whom Magellan's expedition came in contact when they landed in the neighborhood of Samar. One Pigafetta kept a diary of this "first voyage around the world," from which we get the earliest description of the inhabitants of the island.* The vessels of Magellan visited several of the islands in the Archipelago south of Luzon, but did not touch there. Everywhere they found a very sparse population, and despite their offers of merchandise in exchange for provisions they were with difficulty able to secure enough food to stave off starvation. Cebu seems to have been one of the most populous and important centers. Vessels from far foreign parts came there for gold and slaves. The voyagers heard that a junk had departed thence to Siam just before their arrival and were told that the Chinese had been trading with the islands for centuries. "To the northeast," says Pigafetta, "is the island of Lozon, which is very great, to which go every year for the sake of traffic six or eight junks from the country of the Lechios," by which he probably meant one of the provinces of China.† At

* *Primer Viaje alrededor del Mundo*. Spanish translation, Madrid, 1899.

† Some of the writers of the sixteenth century entertained a belief, for which there does not appear to have been any good ground, that the Philippines at one time constituted a colony of the Chinese Empire. Mendoza in his *History of*

the island of Sulu the pearl fisheries, for which the locality is celebrated to-day, excited the interest of the Spaniards. On the coast of Mindanao they fell in with the curious "sea gypsies," the Samal Laut, who frequent the same region at the present time and now, as then, form communities of boat-dwellers, moving from place to place with the changing seasons and conditions. They passed an island "whose inhabitants," says the chronicler, "are negroes like those of Ethiopia." This is the only mention he makes of the Negritos, who must, however, have been numerous inland of several of the islands touched at.

EARLY MALAY OCCUPATION.

The three expeditions succeeding that of Magellan made no settlement in the islands and added hardly anything to the information we have regarding them. In 1565 Legaspi landed on the island of Cebu and, despite resistance, maintained his footing, with perhaps one hundred and fifty men, until reinforcements reached him three years later from Mexico. Legaspi then proceeded to the conquest of Panay,

China (1586) states that "these islands were formerly subject to the King of China until he relinquished them voluntarily." In "The Philippine Islands" (1609), De Morga said: "The *Dutch Memorable Embassies* states that the Spaniards subjected these islands almost without striking a blow, the inhabitants having forgotten the art of war, and almost renounced civil life since they shook off the Chinese Yoke. Since the Chinese had lost their dominion over these islands they had not ceased to trade with them," etc.

which was made the base from which the occupation of Mindoro and Luzon was effected. The most populous portions of the Archipelago at this time were Cebu, Panay in the vicinity of Iloilo, the country about Manila Bay, and around Laguna de Bay, the valleys of the Pampanga and Bicol rivers, and the coast of Ilocos. Even in these sections, however, the inhabitants were very scanty, and the largest centers consisted of communities of only a few thousand souls under their independent chieftains, who still retained the Hindu title of *rájá*. Tavera says, "these small groups were in many places known by the name of *barangay*, which is also the exact word used to describe a small craft used by the indigines, and would therefore appear to indicate that the people forming each of these town groups were descendants of the crews of particular crafts since the time of their original immigration to these islands. The population of the various *barangayes* was in some cases not over fifty inhabitants and in others, as was observed by Selcedo in Ilocos, the number reached as high as seven thousand."* Slavery was universally maintained amongst these natives of Malay blood.

* "The term *balangay*, or boat, still applied to the villages, recalls the time when these mariners, encamping on the beach, continued to lead much the same life as when scouring the high seas in their *praus*. As was the case with the *sampans*, or junks, of the more recent Chinese settlers every *balangay* became the cradle of a Malay colony." The Earth and its Inhabitants. Elisee Reclus. New York, 1892.

There were different degrees of the condition, and it was created in a variety of ways. Prisoners of war, or persons secured by purchase, were absolute chattels. Others were held in perpetual service who might not be disposed of by their masters. A man sometimes entered into bondage as security for a loan, and in this case the creditor might transfer the debt and the security. One forfeited his freedom by trespassing upon the lands or dwelling of the chief, or by looking at the chief's wife. Slavery was sometimes the penalty, by commutation from capital punishment, for certain crimes, such as the seduction of the wife, or daughter, of a leading member of the community.

Each resident, or perhaps family unit, of the *barangay* had a definite allotment of land. No member of the community might violate his neighbor's landrights, nor might the members of one *barangay* encroach upon the boundaries of another. Land might pass by purchase, gift, or inheritance, and in some instances the chief had acquired all the land of the *barangay*.

Occasionally independent *barangayes* would form a confederation for mutual defense, or for co-operation in some enterprise. They would then create a common chief by popular election, usually from one of the families in which that office was hereditary. The chief, who was called *rájá*, or *dato*, acted as judge in all criminal trials and civil disputes. There

were certain recognized offenses and penalties, but nothing approaching to a code of laws. It was almost always possible for the criminal to secure exemption from other punishment by the payment of a compensatory fine to the injured person, or to the chief. A constant state of petty warfare existed. In addition to fights among themselves, the various communities, or federations, had to repel the attacks of *ladrones* and pirates and to hold in check the Negritos. As a rule only free men were engaged as warriors, but slaves were commonly employed as rowers in the sea fights. The arms used were lances, bows and arrows, and the famous Malay kris. For protection, helmets, and shields of wood and copper, were employed, and breastplates of horn. In various localities the Spaniards were opposed by natives using cannon. There was a foundry in Manila under the supervision of a Portuguese, or Hindu, where the cannon were cast. It is probable, however, that the art was learned from the Chinese. Legaspi, writing to the King of Spain (1570), regarding the Moros of Panay, says: "The latter have artillery, which they themselves cast and finish, and likewise powder and other ammunition. . . . I send you two bronze culverins made by the Moros of this land, so that your Majesty may see what dexterity they possess in making and casting artillery."

Money was unknown and crude gold was used as a substitute, but their trade was for the most part

conducted on a system of barter in kind, that was, perhaps, better adapted to the economic condition of the bulk of the people. They had standard weights and measures derived from the Chinese, some of which are still in use. They held periodical fairs (an old-time institution of the Malays) at different points, to which the natives of neighboring districts resorted in their light draft boats, bringing the product of the field and the loom, as well as articles of ornament fashioned from gold, silver, copper, and mother-of-pearl.

Some of the Malayan tribes had a primitive literature. Their alphabet consisted of seventeen letters, three of which were vowels. Like the early Singalese, they employed the palm leaf in making their books. These, which doubtless contained valuable records of their history and customs, were unfortunately burned by the first missionaries, who deemed them an impediment to the furtherance of the conversion of the islanders.

The religion of the Malayan pagans seems to have been an idolatrous polytheism. They recognized three supreme deities, by whom all the affairs of life were ordered. There were a number of minor gods, or spirits of malevolent intent, who might, however, be propitiated on occasion. Each family worshipped the spirits of its ancestors, termed *anitos*, who were believed to be capable of exerting a beneficial influence over the lives of their descendants. *Anito* idols, fash-

ioned from various materials, were part of the furniture of every home. A certain number of slaves were slain and buried with a man of consequence in order that he might have a proper retinue in the next world. The Visayans interred the slaves alive on these occasions in the belief that living attendants would be more pleasing to the deceased noble. Sometimes slaves were killed and their spirits despatched to the master's ancestors for the purpose of pleading with them to remove from him some illness or calamity.

The funeral ceremonies were feasts at which it was customary to dissipate in food and drink a considerable portion of the property left by the deceased. At these ceremonies, animals, and sometimes slaves, were sacrificed, and the priests performed war dances of the wildest character.

The costume of men and women was similar, except that the latter wore cloth of a finer texture. It consisted of a loose shirt-like garment not unlike that worn by the up-country Filipino at the present time, reaching to below the loins, supplemented by a cloth hanging from the waist. It was their custom to go without head-covering. The apparel of the well-to-do was decorated with laces and embroidery, which the natives made with great skill. Men and women wore combs in their hair and adorned their bodies with ear and finger rings, bangles, necklaces, and anklets. The majority of the people went barefoot, but the upper class wore shoes, or slippers. It was consid-

ered a mark of distinction to perforate the teeth and fill the holes with gold, and to file the incisors to a point. The latter practice still prevails among certain wild tribes.

Their houses, of bamboo and palm leaf thatch, were erected at a considerable height upon timber supports. A village was frequently built several hundred feet out in the water of a lake, or river, or upon the shore of the sea.

It is from these people that the great body of Christian and domesticated natives of the Philippines are descended. They are from the same Malayan stock as the Moro, but owing to differences of religion, environment, manner of life and political condition, have developed diversified physical and mental characteristics. They are the "representative" people of the Archipelago, and to them the name "Filipino" is applied in a distinctive sense.

LEGASPI'S OPINION OF THE NATIVES.

In 1565, after four years' residence in the islands, Legaspi wrote thus of the Malay natives of Cebu:

"These people wear clothes, but they go barefooted. Their dress is made of cotton, or of a kind of grass resembling raw silk. . . . They are a crafty and treacherous race, and understand everything. . . . They are naturally of a cowardly disposition and distrustful, and if one has treated them ill, they never came back. . . . They are a

people extremely vicious, fickle, untruthful, and full of superstitions. No law binds relative to relative, parents to children, or brother to brother. No person favors another unless it is for his own interest. On the other hand, if a man, in some time of need, shelters a relative, or a brother, in his house, supports him and provides him with food for a few days, he will consider that relative as his slave from that time on and is served by him. . . . When these people give or lend anything to one another the favor must be repaid double, even if between parents and children, or between brothers. At times they sell their own children when there is little need or necessity for doing so.

“Privateering and robbery have a natural attraction for them. Whenever the occasion presents itself they rob one another, even if they be neighbors, or relatives, and when they see, or meet, one another in the open fields at nightfall they rob and seize one another. . . . Any native who possesses a basketful of rice will not seek for more, or do any further work until it is finished. Thus does their idleness surpass their covetousness. . . . I believe that these natives could be easily subdued by good treatment and the display of kindness, . . . but if we undertake to subdue them by force of arms and make war on them they will perish and we will lose both friends and foes, for they readily abandon their houses and towns for other places, or precipitately disperse among

the mountains and uplands, and neglect to plant their fields. . . . One can see a proof of this in the length of time it takes them to settle down again in a town which has been plundered, even if no one of them has been killed, or captured. . . . They easily believe what is told and presented forcibly to them. They hold some superstitions, such as the casting of lots before doing anything, and other wretched practices, all of which will be easily eradicated if we have some priests who know their language and will preach to them."

The early descriptions of native character must be taken with a great deal of reserve. Indeed, nothing in the least approaching a general agreement upon the subject has ever been arrived at. When several witnesses in later times, who have enjoyed the advantage of intimate contact with the native over a long term of years, reach materially differing, and often contradictory, conclusions, it is easy to believe that the earlier Spanish residents, whose opportunities for close observation were much inferior, should have erred in their estimates. Furthermore, the point of view of the Spanish conquerors was entirely unfavorable to a right understanding. They had a fanatical belief in a divine mission and considered the islands a possession of their King by right of Papal gift. That the natives did not fall in with this idea was incomprehensible to them and created in their minds an adverse prejudice.

During the past four centuries of European influence the character of the Filipino has doubtless improved in many respects, but the more recent writers have depicted it in anything but a flattering light. The character of a people is always, to a considerable extent, a reflection of its government, and the history of the colony under Spanish dominion will afford many a key to the present traits and disposition of the Filipinos. Tomas de Comyn expresses this idea in his "State of the Philippine Islands" (1820). Referring to the Christian tribes, whom we now have under consideration, he says:

"They are credulous and superstitious, cunning, yet of weak capacities, but possibly a great number of their defects may be attributed to their ignorance, want of civilization, *and the bad administration of justice*. They are, nevertheless, hospitable to strangers and, excepting in their robberies, piracies, and acts of public, and private, revenge, harmless in their manners.

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"Besides distance from the mother country and, as will be seen by their history, the dreadful misfortunes to which they have been so often exposed, the wavering and uncertain nature of the regulations intended for their government, the hostility of the European rivals (to one another), and the litigious spirit of the inhabitants themselves, as well as the unceasing lawsuits and dissensions to which this has

given rise have been of most material injury to the colony."

MODERN ESTIMATES OF THE FILIPINO.

Although the differences of opinion prevail at all periods among writers dealing with the Filipinos, it is noticeable that their strictures decrease with the advancing years and that their condemnation is more frequently tempered by the mention of redeeming features.

Dean C. Worcester, at present a member of the Philippine Commission, writes as follows:

"The native is a philosopher. He works when obliged to and rests whenever he can get an opportunity. . . . From the very outset our servants stole from us. . . . The Philippine native seems ever ready to kill his last fowl for a stranger or share with him his last pot of rice. . . . On the whole I believe that they are fairly intelligent, and they are often most anxious for an opportunity to get some education. . . . They frequently lie without any excuse whatever, unless it be the æsthetic satisfaction derived from the exercise of their remarkable talent in this direction. When one of them is detected in a falsehood he is simply chagrined that his performance was not more creditably carried out. He feels no sense of moral guilt and cannot understand being punished for what is not to his mind an offense. . . . The Filipino certainly has many

good qualities to offset his bad traits. The traveler cannot fail to be impressed by his open-handed and cheerful hospitality. . . . If cleanliness be next to godliness, he certainly has much to recommend him. Every village has its bath if there is any chance for one, and men, women, and children patronize it liberally. . . . Hardly less noticeable than the almost universal hospitality are the well-regulated homes and the happy family life that one finds to be the rule. Children are orderly, respectful, and obedient to their parents. Wives are allowed an amount of liberty hardly equaled in any other Eastern country, and they seldom abuse it.

"The native is self-respecting and self-restrained to a remarkable degree. He is patient under misfortune, and forbearing under provocation. While it is stretching the truth to say that he never reveals anger, he certainly succeeds much better in controlling himself than does the average European. . . . He is a kind father and a dutiful son. His aged relatives are never left in want, but are brought to his home and are welcome to share the best that it affords to the end of their days.* Among his fellows he is genial and sociable. He loves to sing, dance, and make merry. He is a born musician. . . . He

* The testimony to the Filipino's hospitality and his regard for the welfare of his family and relatives is indisputable, although in strong contrast to the statements of Legaspi and other early writers.

is naturally fearless and admires nothing so much as bravery in others."

AN EFFORT TO RECONCILE DIFFERENCES OF OPINION.

Perhaps the differences of conclusion regarding the Filipino character, to which we have referred, are due in some measure to failure to allow for artificial, or acquired, characteristics in the cases of the Filipinos of the cities and large centers of civilization, who exhibit effects of long-continued and close contact with their European over-lords. A subject race which is doomed to occupy a position of hopeless inferiority is more apt to acquire the vices than the virtues of its conquerors and is often forced in self-protection to adopt the natural safeguards of the weak—prevarication, deception, treachery and the rest. Other characteristics of the native may be attributable, in degree at least, to the conditions of domination under which they have lain for centuries.

Perhaps the most universal characteristic of the native is his disregard for truth. This is a confirmed habit due to mental perversion, rather than to vicious impulse, or sinister calculation. The Filipino lies spontaneously, often without purpose, and always without any sense of wrong. This peculiarity is shared by the Chinese and other Orientals. In some cases, where falsehood is contrary to the religious doctrine, justification is found for it, and, perhaps, priestly excuse extended, when it is used to confound

the foreigner, or the oppressor. After all, this is only human nature in the raw.

Until it is thoroughly understood, and allowance is made for inherent peculiarities, the character of an Oriental people cannot be fairly measured by Western standards, nor, since their reasoning is based upon conflicting principles, can one race judge the other with impartiality. The European verdict that "all Asiatics are liars" is true only from the viewpoint of the former. The underdog will generally lie for the sake of saving his hide, and Europeans under such conditions have frequently lied, individually and collectively. The early conquests of the white men have invariably been marked by bad faith toward the conquered, and the story of Spanish colonization is certainly not less marred in this manner than that of any other nation.

The Oriental is above all things exuberantly imaginative; he thinks in hyperbole and speaks in hyperbole. The consequence is that the slow-blooded European, with his precise mental processes and literal expression, is very apt to conceive deliberate deception where no such design is entertained. Even when the Oriental lies with forethought the animus behind the act is frequently harmless. It is often merely a resistless ebullition of his innate love of subtle processes or a desire to please his hearer. Such a mental condition is difficult of comprehension to the Anglo-Saxon with his inborn habit of directness in thought and speech.

Laziness is another defect with which the native is justly charged, but here again it is not difficult to find extenuating circumstances. The energy of any people is measurable by the stimulus to exertion to which it is subject. The indolence natural to all inhabitants of the tropics has been encouraged in the Filipino by the knowledge that increased effort would entail an increase in his taxation, rental, and contribution to the Church, without commensurate advantage to himself; thus his ambition has been reasonably limited to the accomplishment of a slight improvement in his material comfort. Hitherto the Filipino has not had a sufficient incentive to exertion. With worthy objects for which to work; with the possibilities of social advancement and material betterment; with opportunity for mental culture, and with the spread of education, may come, or rather surely will come, awakening of ambition and quickening of energy. It is not, however—fortunately for the Western nations—possible that a tropical people should exhibit the activity characteristic of the dwellers in temperate climes.

The Filipino is not practical. He has no concern beyond to-day, and is apparently incapable of a sustained purpose, but when one surveys the environment, and political and economic condition, of these people during the past centuries it is difficult to see how it could be otherwise with them. On the other hand the native is very susceptible to guidance

and is always willing, and frequently eager, to learn. Unlike the Chinaman, he has a humble estimate of his own mental powers, and never thinks to pit his own ideas against those of his European mentor. Indeed, the Filipino is a docile and a faithful pupil, and probably much of the condemnation of him as a laborer is due to the fact that, in the hands of a European master, he is prone to refrain from all initiative in action, and even thought, and to do precisely as he is told. It is more than likely that, if intelligent advantage is taken of this tendency, the native apprentice may be converted into a highly capable and satisfactory workman. He lacks originality, it is true, but he has the imitative faculty in an extreme degree, and "only needs to be shown," as one who has employed native labor extensively declares, in order to do a thing as well as the demonstrator. It must be borne in mind that the restricted place opened to the Filipino in the Spanish civilization afforded little scope for the cultivation of responsibility, initiative, or endeavor. Under the encouraging conditions of the new *régime*, with its ample opportunities, he may develop unsuspected qualities of a high order.

Under guidance, or control, the average native will live in a useful and rational manner, but he is very thoughtless, and, lacking good influence, is likely to act unwisely, and may even commit grave offenses on impulse, or for want of serious consideration. Seldom, however, will he be guilty of a crime on his own

initiative. There is comparatively little vice in his composition, but he is easily led toward good, or evil. In fact his faults and shortcomings are largely those of an infant stage of mental development. There is much of the child in his makeup, and of a child whose training has not been of the best. He is deferent, almost to the extent of servility, to superiority of intellect, station, or wealth. Although he exhibits ingenuity and resourcefulness in the everyday affairs of life, he lacks self-reliance and moral courage. He is not deficient in physical bravery, but the quality is of the spontaneous and evanescent order. He is readily depressed by a check, or by a sense of inferiority to his antagonist. Unlike the Moro, he accepts defeat with placid resignation, and as a victor he is cruel and ungenerous. Like the Sipahi, the Filipino makes an excellent fighting man under European leadership, but his worth in this capacity is entirely dependent upon such leadership. His dislike of discipline is a bar to his becoming a good soldier at present. He displays the common Oriental trait of endurance under hardship and suffering and the equally common Oriental tendency to supine submission to the buffets of Fate.

The Filipino is extremely sober, and scrupulously clean in his person and surroundings, traits that may have been derived from early Hindu influences, and which were certainly never enhanced by contact with the aboriginal tribes. He has the domestic qualities

well developed. He is a good father and husband, and displays great regard and respect for aged parents. Indeed, the ties of relationship are acknowledged to a remarkable extent. A household commonly includes two, or three, poor kinsmen, whose connection with the heads of the family is almost too remote to be traced. His hospitality is proverbial. A well-to-do Filipino will house a traveler as long as he may choose to stay. Everything that his host possesses—horses, carriages, guns, servants, and the rest—is cheerfully placed at the command of the visitor. No remuneration whatever would be accepted, nor is any kind of return expected, or desired.

The Filipino is grave and dignified in bearing, and rarely displays emotion of any kind, although he is capable of strong passion. He has little, or no, sense of humor, never makes a jocular remark and seldom appreciates one. He is genial and extremely sociable. Gambling is a mania with him, and he is very fond of show. He is improvident to the extent of recklessness, and will spend his last *peso* on a cock-fight, for a feast, or in the purchase of cheap trinkets for his wife.

Whilst the Filipino is honest in the main, his conception of moral obligations is not of the keenest. He rarely steals, but he may borrow without any thought of return, unless demand is made upon him. He will secure money as a loan, or in consideration of future service, and, although he never repudiates the in-

debtedness, it is frequently difficult to enforce repayment, or the performance of the promised work. His sense of gratitude is rather dull. He is apt to suspect an ulterior motive behind a concession, or a gift, and this may be a logical outcome of his experience with the white man.

The Filipino compares favorably with the Chinaman, or the Hindu, and gives greater promise of future development than either. He is more tractable than the former, and has none of his innate aversion to Western civilization; he is more intelligent than the latter, and is not hampered by religious prejudices, nor caste restrictions. Indeed, there is no Eastern people that presents more favorable material for conversion to Western civilization than do the Christian tribes of the Philippine Islands.

Whilst the foregoing applies in general to the Christian natives, some of the tribes furnish marked exceptions in certain particulars and the small upper class, the *gente ilustrada*, have developed many qualities that are at variance with the typical Filipino character.

THE NON-CHRISTIAN MALAYS.

Of the non-Christian Malays, excepting Moros, the Igorots are by far the most numerous. The census enumeration places them in excess of 183,000. They are distributed over eleven of the northern provinces of Luzon in various stages of development,

ranging from the wild head-hunters of Bontoc to the semi-civilized Tinguian of Abra. They are most numerous in Lepanto-Bontoc, Nueva Vizcaya, and Benguet, where they constitute the bulk of the populations. They inhabit the higher valleys and mountain ranges. In general they are physically superior to the Filipinos of the lowlands. They are an intelligent, happy people, of good morals and industrious habits, with a strong vein of independence in their composition.

The Malays never effected large political organizations. The point is illustrated in the *barangay* system of the early Tagalogs. The political unit of the Igorots is the *barrio*, or hamlet, several of which may go to make up a township. Under normal conditions the town across the valley is an enemy and seeks the heads of its neighbors. "I have stood," says Doctor Barrows, "in a single Igorot town and looked across the steep hillsides and river valleys where in every direction within a radius of six miles a man's life of that town would have been unsafe. His head would unfailingly have been taken had he ventured unprotected so far from home." This applies particularly to the eastern portion of the Igorot country. Toward the west coast the people are much more nearly civilized and have abandoned their old-time practice of head-hunting. Here the central government is recognized and respected and, although in many districts the ancient petty courts are still

maintained, appeals from their decisions are frequently made to the American authorities.

Every Igorot *barrio* has its judicial body of old men, who dispose of all cases from petty theft to murder. If the matter is one affecting the entire town a composite court is formed of members of the various *barrios* interested. Most penalties take the form of a fine payable in cattle, or other property. Trial by ordeal is commonly practiced. The *podung*, or bloody test, consists in boring holes in the scalps of the suspect and his accuser. The verdict goes to the one who bleeds the least. When one of a number of persons is believed to be a criminal, each of them is given a mouthful of dry rice to chew. After mastication this is spat out upon the hands of the judges and he whose mass exhibits the least saliva is deemed convicted, in accordance with their proverb, which says, "A guilty man has a dry mouth."

The Sun is the great god of the Igorots, and the Moon is his brother. They believe in a number of evil spirits. An Igorot maintains that personally he is sinless and can do no wrong unless at the instigation of one of these spirits, which enters into him and subdues his will. One who has had intimate relations with them says, "the conception of right and wrong is a quality fully developed in the Igorot mind throughout all conditions of life! and fully in accord with the present civilized conception of right and wrong. They believe in virtue in both male and

female; they believe in honesty and faithfulness in the performance of any task, no matter how arduous it is made for them by those in authority, and perform these tasks cheerfully."

The *canao* is a ceremonial dance and feast. It is the occasion for the consumption of a great deal of meat and drink. Horse, *carabao*, hog, and deer are eaten, and dog is an especial delicacy. It is a point of etiquette with the Igorot to continue eating as long as a fragment of the viands remains. *Bassi* is an intoxicant produced from rice and sugar-cane. It is freely consumed by the Igorots, who are by no means so abstemious as the Filipino.

Amongst the Igorots, as with almost all wild, or savage, races, the women perform the greater share of labor, but the men are very far from being idle, and it is possible that the arrangement had its origin as a defensive measure. Even at this day, amongst the worst head-hunters, the women work in the paddy fields whilst the men mount guard with their arms against their neighbors.

Unlike the Negritos they are a stationary people. A village will move only for serious reasons, and then never more than a few miles from its old site. For the Igorot the whole world is peopled with evil spirits, and human beings eager to decapitate him, and therefore he dreads to cross his communal boundaries. This of course does not apply to the western communities which are in touch with the civilization of

the seacoast provinces, but even these retain their sedentary tendencies.

They live poorly and not under the most sanitary conditions, but their wants are few, and they are perfectly contented. There is no such thing as pauperism amongst them. The aged, indigent, and crippled are cheerfully supported by the community. The case is reported of a man in one of their *barrios* who has been dangerously insane for nine years. He has been confined in a hut all this time and two men of the community have been detailed each week to feed him and keep his habitation clean. When any person dies one-half of his edible possessions and of his herds and flocks is eaten up by the community to which he belonged. During the feast the body of the deceased is tied in a chair in his house that he may see that no personal enemy partakes of his bounty. The burial of a rich man may thus be deferred for months.

THE MOROS.

The word "Moro," or Moor, in its original signification simply meant Muhammadan. It is not an ethnologic term, but is generally used at present as a comprehensive designation for the several Malayan tribes of the southern islands, who adhere to Islam.

We have already mentioned the Samal Laut, those curious gypsies of the sea, who wandered long ago from their old haunts in Johore and the Straits of

Malacca to the Sulu Archipelago. Great numbers of their descendants, named Bajaus, are found about those islands to-day and along the southern coast of Mindanao. They maintain the manner of life of their roving ancestors. Each family inhabits a boat and a fleet of half a dozen or so comprises a community. They have no political organization, but recognize temporarily the authority of the *dato* off whose shore they may happen to be lying and pay tribute to him during their stay. They move about as inclination, or the monsoon, may dictate, and absolutely make their home upon the waters. They traffic in the products of the sea and find their main subsistence in them. They barter *trepang*, edible seaweed, and sharks' fins with the Chinese traders, for tapioca and cloth.

Slavery is general among the Bajaus, and every man of a community is required to work one or two days of each week for his chief, or *capitan* Bajau.

Despite their wandering lives upon the water, the Bajaus never consign their dead to the sea, but bury them upon some particular island which has been selected as the family, or community, cemetery. No matter how far away they may be, or how engaged, when one of their number dies they will carry his body to the customary burying ground. Absolutely everything that the Bajau possessed is interred with him. Even his boat is broken up and the pieces placed in his grave.

The Samal Moros are descended from the same stock as the Bajaus, but have abandoned the life upon the water, though they still live over it, their villages being built over the sea, facing broad, sandy beaches. The Samals affect to despise their boat-dwelling brothers, who are degenerates in the matter of religion. Large villages of Samals are found in different parts of the Sulu Archipelago. They are the dominant people of Zamboanga peninsula, and form the bulk of the population of the Tawi Tawi group. Their chief occupation everywhere is fishing, with which, in some localities, they combine a little agriculture.

The Samals were the dreaded Malay pirates whose depredations the Spaniards were powerless to check until gunboats were brought to bear against them. Up till within sixty years ago they made annual raids upon the Visayan Islands, looting towns and carrying away captives to slavery. It is said that the last such expedition dates from less than twenty-five years ago.

For the most part the Moros live upon the coasts, but there is a great tribe, the Malanao, numbering upwards of 95,000, in the interior of Mindanao. Their towns are thickly clustered about the district around Lake Lanao. Another numerous tribe is the Maguindanao, settled chiefly in the district of Cotabato, whence they have extended to the Gulf of Davao, on the opposite coast.

The Moros are prosperous and happy. All their

needs, or possible wants, are easily supplied. The sea and the soil yield subsistence with very little effort and beyond a full stomach and a few simple luxuries the desires of the Moro do not extend; nor does his environment afford any scope for ambition, or energy. Since the exercise of his fighting proclivities has been curtailed there does not appear to be any outlet for his activity.

Almost all Moro industries are of the domestic order. Agriculture, supplemented by fishing, is the mainstay of the people. They raise rice, corn, *camosotes*, or sweet potatoes, and other vegetables by a very simple, but apparently satisfactory, method. The ground is broken with pointed sticks and, aside from sowing and weeding, nothing more is done to it.

Boat building is a hereditary occupation with the Moros and an important industry, where every family owns one boat at least and often several. Every man can repair a boat, and most of them are able to make some kind of craft. Even the inland Moro passes a great part of his time upon the waters of the lakes and rivers.

Another industry of consequence and repute is that of the manufacture of weapons. From Chinese traders are obtained the iron and steel which are forged into *krisses*, *bolos*, spears, daggers, and knives. As with all war-like people, the smith is an honored member of the community. Aside from constructing craft and fashioning weapons, the Moros show

little aptitude, or inclination, for mechanical pursuits. There are among them a few artisans who work metal into articles of ornament, and a rude form of pottery is produced without the use of a firing kiln. The women weave a serviceable quality of cloth, but they know little about spinning and are dependent upon the Chinese for their thread.

The Moros live in the ordinary Malayan type of dwelling, elevated upon piles and often erected near, or over, the water. The timbers are fastened with rattan, and the roofs and walls covered with palm leaves. These houses answer their purpose very well. They are cool and waterproof and withstand the frequent earthquake shocks. The Moros are not clean in their surroundings as are the Filipinos, nor do they seem to consider domestic comfort to the same extent. They are polygamists, in accordance with Kuranic license. Wives are purchased, the suitor paying to the family of the bride an amount commensurate with his position, or means. Divorce may be effected by mutual agreement, or a man, finding himself unable to support all his wives, may send one, or more, back to their families. A woman thus returning to her home takes all her personal belongings and whatever she may have received from her husband during her wedded life. The family relations are closely drawn. Wives receive kindly treatment and are consulted in family matters. Both parents display affection toward their offspring. The

Muhammadan law of abstinence from the use of intoxicants and the flesh of swine is observed, but in other respects the Moros are far from being faithful disciples of Islam. The habit of chewing betel-nut is confirmed amongst men, women, and children. This is a favorite indulgence with the Hindus, and other Asiatics, and doubtless the Malay immigrants to the Philippines brought the custom with them. It does not appear to be injurious, but on the contrary is said to act as a tonic-digestant and a preservative of the teeth.

The social organization of the Moros is simple. There are two main political divisions of the people—freemen and slaves. Slavery existed as an institution among them prior to their advent to the Philippines. The communal unit, ranging from perhaps a dozen in the case of the Bajaus, to possibly ten thousand with the larger tribes, is ruled by a chief, variously termed *sultan*, *rája*, and *dato*. There is no code of laws, but custom and precedent are zealously adhered to. The office of *dato* is generally hereditary and the authority pertaining to it is always recognized by the clan. The chief usually associates with himself a number of men of noble blood, or wealth, who form a sort of court and take an active part in the regulation of the community. All *datos* maintain a retinue of fighting-men, who accompany them everywhere, display being considered quite as important as protection. The *dato* is absolute in authority,

but not often despotic. All land of the community is vested in him, but he rarely disturbs established occupation. He declares war and makes peace, and presides at the administration of justice. A difficulty involving two or more villages is usually adjusted by their respective headmen, but the decision is subject to the vetoes of the chieftains concerned.

Crimes are generally punished by fine, or subjection to slavery. An adulterous woman is mulcted in a heavy fine, which is paid by herself, or her family, to the injured husband, and is shared by him with the *dato* and headmen composing the court. In default of payment the woman is adjudged a slave and her husband has the right to sell her. A man convicted of adultery is sentenced to a fine twice as great as that imposed upon a woman and it is disposed of in the same manner, whilst the culprit is subject to the same alternative in case of failure to pay. A husband discovering his wife in the act of adultery is justified by custom in killing her and her paramour. Incest and carnal assault upon a young girl are punishable by death.

A convicted thief must pay to the victim twice the amount of the theft in addition to a fine, which goes to the headmen. The alternative penalty is enslavement, but the culprit may substitute one of his offspring, who is thus consigned to bondage for life, a striking illustration of visiting the sins of the fathers upon their children. Murder is generally punish-

A HEAD-HUNTER.

The portrait is that of Ifugao, an Igorot chieftain of Nueva Vizcaya, one of the few districts in which head-hunting is still practised when favorable opportunity offers.



able by a heavy fine, subject to the usual division with the court. Confinement is hardly ever resorted to as a penalty, the Moro considering it an inconvenient and uneconomical method of punishment.

Slavery with the Moros takes a mild form. The slave may be a captive from a neighboring tribe, or a wild man of the woods, but more often than the latter he is of pure Malay blood. Such slaves, and those condemned to the condition by the court, as well as those held as security for debt, may be bought and sold. Very often slavery is merely a temporary service in consideration of some benefit received.

Slaves usually live in the same house with their master and practically under the same conditions, eating at his table and, with the exception of liberty, faring in all respects as well as himself. They are not compelled to onerous labor in a country where no hard work is done, and the female slave, in particular, is often treated with the greatest consideration. Under such circumstances the condition of the bondsman is often a great improvement over the life he has been accustomed to.

In general, the Moros are illiterate, superstitious, and non-progressive. Some few have learned to read and write from their priests, or *panditas*, but learning is not esteemed nor encouraged amongst them. They use the Arabic alphabet in the expression of a Malay dialect. The Kuran is an object of abstract veneration. They know very little of its doctrine and are

only slightly submissive to the influence of the priests. Nevertheless, their religion, such as it is, and their jealous regard for their customs will prove a serious bar to civilizing them. The Reverend Pio Pi, superior of the Jesuit Order in the Philippines, writing in 1901, expressed the opinion that the Moros were influenced in their opposition to reduction and culture by (1) their character; (2) their history, or tradition; (3) their fanaticism; (4) their interests. (Certainly a substantial basis of opposition to subvert.) The reverend father characterizes them as haughty, independent, and domineering, accustomed to look upon all other natives with disdain. All of which is unquestionably true, but when it comes to the rest of the arraignment, which is as severe as language can make it, some allowance must be had for a would-be proselyter dealing with a people equally fanatical with his own, and equally convinced of the righteousness of their religious belief.

THE GROWTH OF POPULATION.

The peoples of the Philippines have multiplied rapidly during the past hundred years or so. According to the recent census, the total population of the Philippine Archipelago on March 2, 1903, was 7,635,426. Of this number 6,987,686 enjoyed a considerable degree of civilization, while the remainder, 647,740, consisted of wild people. The civilized people, with the exception of those of foreign birth,

were practically all adherents of the (Roman) Catholic Church, while of the peoples here classified as wild a large proportion, probably more than two-fifths, were Muhammadans in religion and were well known in the islands as Moros. The remaining three-fifths belonged to various tribes, differing from one another in degrees of barbarism. At the close of the sixteenth century the subjection of the islands by the Spaniards was almost as complete as at any later time. As the conquest extended, the population was parcelled out amongst soldiers, and others under a system of *encomiendas*, which prevailed from the time of Legaspi, the first governor, until the beginning of the seventeenth century. The system, as practiced in the American possessions of Spain, practically embraced slavery, but its extension to the Philippines was accompanied by several conditions and restrictions in the interests of the natives, which, however, were more or less disregarded. The *encomienda* was a royal grant of a certain portion of the land with its native population, and included the right to collect from these the *tributo* and to enjoy the fruit of their labor. Soldiers, as they retired from service, had appropriated to them certain communities for their special benefit and other villages were reserved for the King. Officials and favored civilians became grantees in the same manner. The system naturally had the effect of extending the settlement of the country; indeed, it became the chief factor in that

movement and eventually the whole population, aside from the wild Negritos and Igorots, and the unconquerable Moros, was included in *encomiendas*. Each family represented one *tributo* and the Spaniards reckoned four souls to a family.

The *Relación de Encomiendas*, submitted to the King in 1591, reported a total of 166,903 *tributos*, which would give, in approximate figures, a population of 667,612 for the territory under military control. In all probability the total population of the islands at that time, including the country of the Muhammadan Malays, did not much exceed 800,000

During the first two hundred and fifty years of their occupation, the Spaniards, actuated by a policy of protection toward their other colonies and the merchants at home trading with them, prohibited all trade of the Philippines with foreign countries. Thus not only was commercial development checked, but actual retrogression was effected by the discontinuance of the trade which had existed before the Spanish conquest. Under such conditions large increase of population was not to be expected, and we learn from the account of Father San Antonio, the Franciscan historian, that in 1735 the islands contained but 837,182 souls. In 1800 Zuniga estimates the population at 1,561,251.

In the nineteenth century greatly improved economic conditions, due to the opening of the country to the commerce of the world, had a marked effect in the multiplication of the people. In 1845 Fray

Manuel Buzeta published a notable work entitled a "Geographical, Statistical, and Historical Dictionary of the Philippines," from which the following is extracted:

"We have already seen how, in the last years of the past century and the first of this century, the political conditions of the Philippines presented in twenty-five provinces, 1,522,221 souls and 312,251 tributes, and according to the state of the population published by order of his excellency, the *ayuntamiento* of Manila, this population was increasing, so that in 1808 the number of souls was 1,741,034; in 1812 to 1,933,331; in 1815 to 2,052,992; in 1817 to 2,062,805; in 1818 to 2,106,836.

"Various data which we have, and for whose exactness we cannot vouch, give in 1829 2,593,287, and in 1833 a population of 3,153,290. The *Guia de Manila* of the year 1840 presents the population as 3,209,077 and compared with the population that we have seen was reported in 1735, it would appear that the 837,182 souls of the earlier epoch were to those of 1840 as 1 to 3, a proportion which represents a gain of 283 per cent. in one hundred and five years. In the five years since, the population of the Philippines had been increasing at the rate of 1.7 per cent. per year, so that in 1845 the number of souls was 3,488,258."

In the fifty-eight years that have elapsed since Buzeta's enumeration the population of the islands has more than doubled. No doubt, had as complete

a census as that of 1903 been taken in 1897, the figures would have shown a larger population than at present. Since the latter year the people have been subject to the effects of war, destruction of industry, loss of cattle and homes, and, perhaps most serious of all influences, dreadful visitations of smallpox and cholera. Doctor Barrows says that "the conclusion to be arrived at is that the Christian Philippine population shows a power of multiplying scarcely exceeded by any race of people. The hope of building up here in the course of a few generations a people equal in numbers and national resources to the Japanese at the present time, does not seem illusory. Given a prolific stock, expanding prosperity and commerce, and favorable political conditions, population, as proved by a hundred historical instances, can go up by leaps and bounds. I believe that all these conditions together may be realized here in the Philippines. A great deal depends also upon the mental attitude of the people. If it be hopeful, aspiring, cheered by increasing gains and opportunities—then is there added a factor of the utmost consideration. Population has no deadlier enemy than despondency and melancholia. There is a deep wisdom in the intentions of the American Government to meet more than half way the eager ambitions of this race."

EARLY HISTORY.

III.

EARLY HISTORY.

The Discovery of the Philippines—The Inception of Spanish Dominion—The Chinese Invasion—Internal Dissensions—Growth of the Ecclesiastical Power—Conflict of Church and State—The Important Services of the Friars—Attempts to Christianize Japan—Dutch Attacks Upon the Colony—Influx of Chinese Traders—The Spaniards Come into Contact With the Moros—The British Take Manila—Uprisings of the Natives.

At the beginning of the sixteenth century the two great maritime powers, Spain and Portugal, were at the height of their rivalry and in the midst of their extensive discoveries. In the hope of settling the frequent disputes as to their respective trading rights Pope Alexander the Sixth had issued a papal bull, in 1494, dividing the world into two hemispheres, practically the same as those recognized to-day, and giving to the Spaniards all heathen lands in the western half and to the Portuguese all those in the eastern.

The path of Portuguese exploration had been eastward, and they had reached Asia by way of the Cape of Good Hope and the Indian Ocean. Following the discovery of America the eyes of all the world's geographers and navigators were turned toward the west. When Balboa sighted the Pacific a fresh incentive was given to adventure, and ardent spirits of

both nations became eager to follow the course of the setting sun until they should reach the vast ocean which lay beyond the American continent. Chance favored the Spaniards, and strangely enough they owed their success in this instance to a Portuguese as they had formerly owed it to a native of Genoa. In truth, the Spanish discoveries were mainly due to religious zeal and greed for gold. Their native sailors were seldom actuated by sheer love of adventure, as were many of the English sea captains of the same age, or by a desire for scientific investigation, such as moved Magellan and Columbus.

THE DISCOVERY OF THE PHILIPPINES.

Hernando de Maghallanes was a Portuguese noble, a practical mathematician and navigator, and a man of extraordinary parts. As a soldier and a sailor he had distinguished himself in a wide field. He served under the famous Albuquerque in his expedition to Asia, and took part in the siege of Malacca. Later he accompanied the expedition to the Moluccas, which discovered Ternate and other islands. On this occasion he gained information which confirmed his belief that a passage existed between the two great oceans of the globe, and he returned to Europe possessed with a determination to seek it. Whilst pursuing investigations tending toward the execution of his project, Magellan, to give him the familiar form of his name, was ordered to the wars in Africa,

where he received a wound which rendered him lame for life. Upon his return he fell a victim to one of the court intrigues so common at the time. Jealous of his achievements and favor with the King, certain nobles made false accusations against him, which gained the credence of King Emmanuel. Disgusted at the perfidy of his companions in arms and the ingratitude of his royal master, Magellan renounced his nationality and offered his services to the Spanish monarch. He was graciously received by King Charles the First and immediately became a naturalized Spaniard. Magellan was eager to essay the discovery of a western passage to the Orient, and the King of Spain readily granted the necessary permission, notwithstanding numerous attempts in the same direction had failed. An agreement was signed, by the terms of which the King undertook to defray the expense of fitting out five ships with their complement of men-at-arms and sailors. Magellan on his part agreed to devote his energies to the discovery of spice islands within the limits of the papal grant.

On the 10th of August, 1519, the fleet sailed out of the harbor of San Lucar de Barrameda. On the 13th of December they reached Rio Janeiro and continued their voyage along the coast in search of the passage to the Pacific. Soon the hardships incident to such an undertaking began to breed discontent among the men and dissensions arose between the captains. Two of the latter broke into open mutiny. They were put

to death by the orders of the commander, and discipline was restored. On the 26th of November, 1520, the expedition had rounded Cape Horn and found itself in the Pacific Ocean. The fleet, now reduced to three sails, shipwreck and desertion accounting for the others, cheerfully headed across the broad expanse of ocean and, on the 16th of March, 1521, arrived at the island of Limasagua, just off the south end of Leyte. Magellan continued to Cebu, where he made a treaty with the Chief, and ratified it by the ancient Blood Compact of the Malays. A few days afterwards Magellan accompanied a war expedition of his new ally to the Island of Mactan and in the affray that followed he was wounded, probably by a poisoned arrow, and died on the 27th of April, 1521. Thus ended, in a petty skirmish with savages, one of the most brilliant lives of the age.

On the 6th of September, 1522, Juan Sebastian Elcano, in command of the "Victoria," representing all that remained of Magellan's expedition, cast anchor in the port from which he had started three years before. In returning from the Philippines, Elcano had reached Spain by way of the Cape of Good Hope, thus circumnavigating the earth for the first time. In token of the achievement his family arms, created by royal patent, consist of a globe with the motto: *Primus circumdedit me*. Two more expeditions went to the East in search of spice islands dur-

ing the reign of King Charles, but they accomplished little beyond increasing the rancour of the Portuguese, who complained, not without cause, that the Spaniards were encroaching upon their territory. King Philip of Spain was a man of strong religious convictions and proselyting tendencies. He became possessed of an ambition to subdue and Christianize the Philippines and ordered an expedition to be prepared in Mexico with that object. In accordance with the royal instructions the Governor of Mexico fitted up five ships and manned them with four hundred soldiers and sailors. The command of the expedition was given to Miguel Lopez de Legaspi, a Spaniard of noble birth and a man of wide experience, and to him was delegated the task of representing the King in such territory as might be occupied by the force. Under Legaspi, but with a certain degree of independence in his particular field, was Andres de Urdaneta, an Austin priest, and five friars of his order. To these missionaries was committed the spiritual care of all heathens who might be brought into subjection by the expedition. This division of authority foreshadowed the never-ending conflict between the civil and clerical functionaries in the Philippines during the Spanish *régime*.

THE INCEPTION OF SPANISH DOMINION.

The expedition left Navidad in Mexico on the 21st of November, 1564, and in the following year, on the

27th of April, the anniversary of Magellan's death, landed at Cebu. This, and some of the neighboring islands, were subdued and pacified with comparative ease by the handful of Spaniards.

In 1570, Legaspi, having received reinforcements, despatched his grandson, Juan Salcedo, to the Island of Luzon, which had not up to this time been invaded by the Spaniards. Salcedo probably landed at some point in the Bay of Manila without opposition. He was well received by the local chiefs, Raja Lakan Dola of Tondo, and his nephew, the Raja Soliman of Maynila, as it was then called. These chieftains appear to have surrendered their independence without resistance and a treaty was entered into with them. Salcedo then proceeded to the district of Lake Bombon, one of the most populous in the island, reducing the tribes in his path. He subdued the province of Batangas and returned to Manila.

The ease with which a few hundred Spaniards were able to conquer these islands may excite surprise, but a sufficient explanation is to be found in the fact that the natives had no political organization more extensive than that of the ancient clans of Scotland and no confederation at all resembling, for instance, that of the Maharatas in Hindustan, or that of the North American Indians. The greatest number of fighting men any one chief could oppose to the invaders was probably less than one thousand, and the idea of combining for mutual defense does not seem

to have been entertained. Indeed, the Spaniards never experienced any serious opposition, or hard fighting, in their acquisition, or possession, of the Philippines, unless it was in contests with foreign enemies, until the Tagalog Rebellion of 1896. Learning of the success of his forces in Luzon, Legaspi repaired to the island and declared Manila the capital of the Colony. A fort commanding the Pasig was constructed, a church was built, and houses erected for the Spaniards.

In August, 1571, Legaspi, the first Governor-General of the Philippines, died and was succeeded by Guido de Lavezares. Legaspi's life had been a very useful one to his country, and the speedy pacification of the Philippines was doubtless due in great measure to his wisdom and humanity.

The process of subjugating Luzon proceeded rapidly under Salcedo and Martin de Goiti, the *Maestre de Campo*. On more than one occasion they were accompanied in their expeditions by the Rajas of Tondo and Manila with their armed followers. As a rule, conquered territory was left in the hands of the native *caciques* to govern in the name of the King of Spain. The Negritos invariably refused submission, simply retiring into the mountain fastnesses before the invaders and retaining the independence which they have to-day.

Shortly after Legaspi's occupation of Cebu the Portuguese made a weak effort to wrest the possession

CHINESE MESTIZOS.

The Chinese quarter in Binondo, showing the manner
in which bamboo is floated to market on the canal.

From Stereograph Copyright, by Underwood & Underwood, New York.



fort. The latter was no more than a stockade strengthened with a few culverins. The Chinese assaulted furiously under cover of a shower of hand grenades and at length broke into the enclosure. Here the most desperate hand-to-hand fighting occurred with the result in the balance for a time. Eventually the Chinese were repulsed with great slaughter. Salcedo followed them up in their retreat and inflicted heavy loss upon them.

Li Ma Hung now abandoned the attempt to take Manila, but determined to make a settlement elsewhere. He sailed northward along the coast till he arrived at the mouth of the Agno, up which for a short distance he took his vessel and debarked. The natives offered no opposition, and the Chinese, expecting to be left in peace by the Spaniards, erected houses and a pagoda.

For some months the invaders were undisturbed, but at length Salcedo, having collected a force of two hundred and fifty Spanish men-at-arms and sixteen hundred well-armed natives, with artillery, came upon the Chinese settlement and laid siege to it. For some time Li Ma Hung held out, but realizing the hopelessness of his situation, took advantage of an opportunity to slip out of the river with his fleet. This manœuvre necessitated his leaving the major part of his troops behind, and these, having no further incentive for fight, fled to the mountains. It is generally believed that from these refugees are descended

in large part the numerous Chino-Igorots of the province of Pangasinan.

INTERNAL DISSENSIONS.

Almost with the inception of the orderly administration of the colony began the internal dissensions which have always characterized the Spanish rule of the Philippines. The Governor-General, the Supreme Court, and the religious Orders, perpetually contended with one another and the last among themselves. Questions of respective authority were constantly in dispute between the civil and ecclesiastical officers, often culminating in disgraceful scenes and acts. The jealous antagonism of the friars of one Order toward those of another retarded the work of all and, what was worse, not infrequently destroyed their influence with the natives. Add to this the vacillating and ill-advised policy of the Spanish Government with regard to the Philippines and it would be difficult to imagine a condition of affairs less conducive to the generation and growth of political and commercial prosperity in a newly-acquired country.

The Spanish colony of Mexico was governed by an excellent code of laws, termed the *Leyes de Indias*. These were applied to the Philippine Islands, and had they been observed, conditions must have been very different. The entire system of justice was cumbersome and ill-adapted to the conditions, and, indeed, it remained so to the last. Corruption entered into

every branch of the government from an early date, and, although the home authorities devised measures to prevent the exploitation of the islands by adventurers, they were frequently avoided and little check was placed upon the dishonesty of officials. These were not the shortcomings and failures of a government contending with the difficulties of an experimental problem, but the natural results of the system which obtained during the entire tenure of the islands by Spain.

Civilians and missionaries consulted their own interests regardless of the rights of the natives, or of the prohibitions of law and royal writs. The Spanish *alcaldes* and *encomenderos* maltreated the natives at their pleasure and extorted from them the fruits of their labor.

Slavery was practiced by all classes of Spaniards, and a royal decree prohibiting it was opposed by the governor. These and other abuses led to frequent uprisings, so that twenty years after the death of Legaspi the islands were in a less pacific state than that in which he left them.

GROWTH OF THE ECCLESIASTICAL POWER.

Perhaps the chief weakness in the Spanish rule of the Philippines lay in the undue deference and consideration paid to the friars and their interests by the Spanish Government. Valuable concessions were constantly made to them; their power in the islands

was ever on the increase and always had the support of the national government; they were permitted to interfere with increasing influence in state affairs until the tenure of office of Governors-General and other officials depended upon their good-will; their grievances met with ready redress at Madrid, and complaints against them seldom received consideration.

Members of the Augustin Order, who came with Legaspi's expedition, were the first friars in the Philippines, and they strove hard to prevent the incoming of other Orders. However, the Franciscans, Jesuits, Dominicans, and, last of all, the Recoletos succeeded, with more or less difficulty, in entering the country, each Order in turn being opposed by the members of others which already had representation in the islands. It was sought to minimize their dissensions by dividing the territory between them, but quarrels were nevertheless frequent.

The friars were vowed to poverty and to monastic life. From the latter condition the Pope exempted them of necessity, but only temporarily, and until secular clergy could be provided to take their places in the native communities. They invariably arrived poor, and the allowance for their maintenance was no more than sufficient to keep them in ordinary comfort, but the Orders became the recipients of donations from *devotées* and received large bequests, so that in a short while they had become rich landed

proprietors. In 1601, the wealth of the friars having become notorious, the King commissioned the Auditor to make a report on their property. The friars, however, refused to give the Auditor any information, and the Archbishop threatened to excommunicate him unless he ceased the investigation. As usual with all movements that had the disapproval of the ecclesiastics, the matter was dropped.

In 1653 the friars successfully combatted the order of the Pope to subject them to the authority of the bishops. They maintained that they were amenable to no control except by the superiors of their respective Orders. The point was never settled, and was the cause of numerous disputes and much litigation. The differences between the various Orders seldom prevented them from opposing a solid front to anything looking like an invasion of their general interests.

Royal decrees were heeded as little as the mandates of the local authorities. In response to repeated complaints the King ordered the friars to cease from persuading dying men to will their property to the clergy; from obliging women to enter domestic service in their houses under the pretext of learning Christian doctrine; from charging the natives fees for the administration of the sacrament; and from other well-known abuses. Neither then nor at any later time was there a perceptible decrease in these practices.

The constant conflicts between the representatives of Church and State were a perpetual impediment to the administration of government, and, indeed, at times plunged it into a condition bordering upon anarchy. It was impossible for a viceroy to perform his duties fearlessly and impartially. He might never depend upon loyalty and obedience in the people, or subordinate officials, when the clerical influence was liable to be exerted against him at any time. So jealous were the ecclesiastics of what they considered to be their prerogatives that differences between them and the civil power often arose from the most trivial circumstances and sometimes involved the most serious consequences.

CONFLICT OF CHURCH AND STATE.

Toward the middle of the seventeenth century a Spaniard in Manila murdered a female slave and afterwards sought sanctuary in a convent. The Governor, Hurtado de Corcuera, caused him to be dragged from his asylum and publicly executed. This was the occasion for a violent dispute between the Governor and Archbishop. The latter closed all the churches of the city, doubtless with a view to enlisting the sympathy of the populace upon his side. In this instance the Jesuits upheld the Governor and were forbidden by the Archbishop to preach in any public place under pain of fine and excommunication. Finally a strong coalition of clerics was formed

against the prelate. He was excommunicated; his property was seized, and his office suspended. He appealed to the Supreme Court, but the answer of that body was to impose an additional fine upon him. Eventually he made total submission and issued an official decree admitting his guilt and expressing repentance.

Soon afterwards the Archbishop, smarting under his recent humiliation, seized another opportunity to oppose the civil authority. The Supreme Court, instigated by the Governor, resolved to oust him from his See and banish him from the city. In pursuit of this determination a body of soldiers was sent to arrest him. The Archbishop awaited the troops in the Cathedral, holding the Host aloft in his hands. The soldiers doggedly remained until the prelate was forced by fatigue to replace the sacred object upon the altar, when they seized him and carried him to the uninhabited island of Corregidor, in Manila Bay. Again the Archbishop made an unconditional surrender and was permitted to resume his office.

On account of his part in these events Governor Corcuera was imprisoned for five years by his successor, but upon his release and return to Spain the King rewarded his services with the appointment of Governor of the Canaries. Such uncertainty as to the consequences of his proceedings was sufficient to paralyze the actions of any executive officer.

Governor-General Diego Salcedo, during his entire

term of office (1663-1668), contested the interference of the then Archbishop (Poblete) in civil affairs. The persistent refusal of the Archbishop to comply with certain royal decrees relating to Church appointments led the Governor to expel him from Manila. He was allowed to return upon promise of good behavior, but the friction between the functionaries continued until the death of Poblete. The Governor exhibited his joy at this event by ordering a festival in celebration of it. This indiscretion brought the full power of the Church, with the approval of the King, against the ill-fated Governor. He was seized by order of the Inquisition and cast into a dungeon, where he suffered extreme privation for years. He died on board ship a prisoner consigned to the tender mercies of the *San Oficio* in Mexico.

The successor, like the predecessor, of Salcedo contrived to preserve peace with the representatives of the Church by the simple, if unsatisfactory, method of allowing them to have their own way in all matters, whether or not they came properly within the province of the Church.

With the assumption of office by Juan de Nargas in 1678 the old troubles broke out afresh, and culminated in the banishment of the Archbishop. Upon the expiration of the Governor's term the cleric sought to inflict a public penance upon the former in expiation of his offense, but Nargas was protected by his successor in office, Fernando de Bustamente, from the vengeance of the Archbishop.

Governor-General Bustamante, having discovered serious irregularities in the management of the royal treasury, determined to institute reforms in the collection and disposition of public moneys. It was a righteous, but extremely daring, step to take when every branch of the government was seamed with corruption. A conspiracy was set on foot which included high civilian officials and of course was supported by the ecclesiastics, who had other grievances against the Executive. The Archbishop attempted the arrest of a judge of the Supreme Court, who in turn issued warrants against the Prelate and his followers and the former was imprisoned. A riot ensued, in which it is said the friars sought to enlist the Chinese residents. Priests of each of the Orders, except that of Jesus, led the mob in an attack upon the palace of the Governor. The guards lowered their arms before the upraised crucifixes of the friars, who headed the rioters. The Governor boldly faced the mob with a gun, but it missed fire and he was cut down. Dying and in agony he was dragged to jail, where nothing in alleviation of his suffering was permitted, even water being denied him. He died in the evening of the same day.

Meanwhile Bustamante's son, who had come to his father's assistance, was shot and thrown into the stable of the palace, where he lay for hours without any kind of relief until he expired. No one was ever punished for the murders and other crimes com-

mitted on this occasion. Indeed, the chief instigator of the affair, the Archbishop, assumed the head of the Government upon the death of Fernando de Bustamante and was permitted to retain the position for nine years, after which he was promoted to a See in Mexico.

The strife between Church and State continued, with only brief intervals of peace, during the terms of succeeding Governors, three of whom are said to have died in consequence of the grief and shame brought upon them in these conflicts.

UNWISE MEASURES RESPONSIBLE.

As between the civil and ecclesiastical authorities it is extremely difficult to apportion blame fairly. The data at the command of the student of Philippine history is never wholly reliable nor impartial, but the records and chronicles of the time clearly establish the fact that Spaniards of all classes, laymen and clergy, fell woefully short of the performance of their complete duty. But the chief and fundamental factor in the maladministration of the colony was the system of government that was applied to it. There can be no doubt about the good intentions and humanitarian motives of the legislators in Madrid, but the measures adopted for the execution of their designs were frequently characterized by the utmost unwisdom.

The condemnation of the friars should be tempered by a recognition of their inestimable services.

THE IMPORTANT SERVICES OF THE FRIARS.

What noticeable degree of progress has been attained in the islands is mainly due to them, and without them would not have been achieved. That they labored hard and effectively for the conversion and civilization of the natives is indisputable; that they were moved by a sincere, if sometimes misapplied, zeal for the promotion of religion must be admitted; and that they displayed wonderful devotion and courage in the pursuit of what they considered their religious duties cannot be questioned. The story of the *padre* of Taal is touching testimony to the bravery and self-abnegation which was characteristic of most of his fellows. When we turn with natural disgust from the picture of priests leading a mob of howling rioters in Manila, it were well to cast back a century in the history of Philippine evangelization and look upon the fervent friar penetrating the wilderness upon his solitary mission with crucifix and missal in hand; braving a thousand unfamiliar dangers, reckless of his life, cheerfully inhabiting a shack amongst savages, with no thought but for their welfare. We can forgive the pampered priest of later days much for the sake of the memory of his pioneer prototype.

It must not be supposed that, although the priests

in the capital and the richer parishes lived luxuriously, the lot of the average friar was one of ease. On the contrary, the life of the majority was devoid of pleasure, or even comforts. For years, more or less, according to the ability he displayed, the missionary, after coming into the field, was obliged to live under conditions scarcely differing from those of the natives under his charge. His allowance was barely sufficient to supply the demands of decency. He was cut off from civilization, often not seeing a white man for weeks and months at a stretch. The climate and diet were not the greatest of his trials in an entirely strange environment, and it is greatly to the credit of the class that there was never a lack of ready and eager volunteers with a full understanding of what was before them.

The friars never deserted their flocks in time of danger: on the contrary, they have always been foremost in relief and encouragement. More than one priest has fallen to the fire of an invading enemy, and in time of stress the friar's frock has ever been found to the front. Volcanic eruptions, earthquakes, and epidemics have always found them steadfast at their posts. Numerous charitable and educational institutions owe their being to the Orders, and certain of their members have made notable contributions to the cause of science.

The friars frequently protected the natives against the severities of the *encomenderos* and the civil power.

In the earlier days they were generally on the most amicable terms with their parishioners, and their influence with the natives was the chief factor in enabling the Spaniards to hold the country without the aid of a commanding force.

Some writers expatiate unnecessarily upon the immorality of the priests, which they pretend to have been almost universal. There is no doubt that the charge is justified in the cases of several, but the sweeping indictment of the class is neither supported by evidence nor probability. Those who, like Foreman and Younghusband, are familiar with life in the tropics, might be expected to make allowance for the frailties of a comparatively small number of the only body of voluntary celibates east of Suez.

The power of the friars for good was rapidly waning before the Spanish-American War put an end to their control. With the growing enlightenment of the natives and the spread of education among them, the influence of the priests, which had always owed much of its force to superstitious ignorance, began to fail. Political and religious unity had formed a basis for a national spirit, such as had never existed before, and which now began to exhibit itself in sundry manifestations of a desire for independence. There was no place for the old-time friar in the new order of things. He had become an anachronism. Even though he had been willing, he was quite unable to adapt himself to the changed conditions. The very

forces that operated against him were of his own creation.

The fanaticism of the friars often led them into serious errors of judgment, but no matter how severely we may condemn the resultant acts, we must admire the splendid courage displayed in the prosecution of their convictions, which finds a striking illustration in the story of the attempted conversion of Japan.

ATTEMPTS TO CHRISTIANIZE JAPAN.

At the close of the sixteenth century the Emperor of Japan, whose people had for long maintained trade relations with Luzon, sent an ambassador to Manila. He was well received and the Governor-General in turn despatched an embassy to Japan, where a commercial treaty was effected and the Spanish representatives set sail for the Philippines, accompanied by a party of Japanese nobles and merchants, but the ship with all hands went down upon the way. A second expedition was despatched, and on this occasion the purpose of proselyting was distinctly provided for. Fray Pedro Bautista was appointed ambassador, and his suite included three other priests. A new treaty of commerce was entered into and Bautista secured permission for himself and his fellow priests to remain indefinitely in Japan and to build a church near Osaka.

A Portuguese settlement of traders had been established for many years at Nagasaki, where they had

a Jesuit Mission, whose priests had apparently conducted their affairs and effected their conversions with the tactful diplomacy characteristic of the members of the Order of Jesus, for they seem to have had no friction with the Japanese authorities. Bautista and his companions did not observe the same prudence in their actions, and soon incurred the displeasure of the Emperor on account of their too open and zealous proselyting. An order of expulsion was issued against them, but, although their leader set sail for Manila, the other three Franciscans remained. One of them was thrown into prison and his colleagues became refugees. Fray Bautista's return to the Philippines did not betoken abandonment of the project by any means. In fact, his purpose was solely to secure reinforcements, and he soon landed in Japan again with a number of friars. This proceeding, in the face of his prohibition, seriously angered the Emperor, who ordered the arrest of all the Franciscan priests and their native followers. Twenty-six of these, including Pedro Bautista, were put to an ignominious death. After their ears and noses had been cut off they were paraded about the country and finally crucified at Nagasaki. Meanwhile no restrictions were put upon the priests of the Portuguese settlement.

The horrible end of the Franciscan missionaries, far from deterring their brethren from similar efforts, seems to have created a zealous enthusiasm.

Numbers of priests in the guise of traders succeeded in landing in Japan, and for twenty years or more the influx continued, despite that they were killed whenever discovered. At length the Emperor was forced to issue an edict imposing the penalty of death upon all who might carry priests to the country and the forfeiture of any ship in which a priest had come. This led the owners of vessels to decline to convey missionaries to Japan, and the Archbishop and Governor added their prohibition.

Not deterred by these difficulties the heads of the Orders bought a vessel and paid a large premium to the crew to carry a number of friars and smuggle them into Japan. Ten priests were thus landed and shortly afterwards met death at the stake.

Following this disaster \$10,000 was subscribed in Manila for the purpose of shipping another party of would-be martyrs to Japan. On this occasion thirty-six priests, a greater number than had ever sailed at one time before, embarked, but the vessel was wrecked upon the coast of Ilocos.

A large junk was next prepared at a distance from Manila for the same purpose, but before it could sail the Governor interfered and from that time strictly interposed his power and authority against further missionary enterprise in the same direction. Thus after forty years' endeavor the Philippine friars abandoned the project of Christianizing Japan only when it was physically impossible to proceed with it.

DUTCH ATTACKS UPON THE COLONY.

During the sixteenth and the first half of the following century Spain and Holland were bitter enemies, and their fleets were constantly in collision. Dutch privateers infested the waters about the eastern possessions of Spain. They lay in wait for the Spanish treasure galleons from Mexico, and occasionally secured a rich prize. On the other hand, the Spaniards in the Philippines from time to time fitted out expeditions to attack the Dutch settlements in the Moluccas.

During the Governorship of Juan de Silva (1609-1616) a Dutch squadron anchored off the entrance to Manila Bay. It happened that owing to recent losses by shipwreck and the absence of several vessels the naval forces of the Philippines were unusually weak and in no condition to withstand the enemy. The Dutchmen lay in the path of Chinese and Japanese traders and secured an immense booty. In this occupation several months passed and meanwhile the Spaniards were enabled to prepare an armament. The Governor took advantage of the superstitious failings of the age to pretend a dream in which Saint Mark had appeared to him and promised aid against the enemy. For several days previous to the battle holy images and relics were exposed to public view and carried in procession through the city. The clergy exhorted the populace and did much to dispel the prevailing dread.

De Silva had determined to risk everything upon the impending fight, and in the event of a decisive victory by the Dutch, Manila must have fallen into their hands. The Governor took the command in person and embarked all the available Spaniards, to the number of one thousand, together with a large force of natives, upon the eight ships which formed the line of battle.

The Battle of Playa Hondo was fought on Saint Mark's day. After a fierce fight, that lasted for six hours, the Dutch were completely defeated, three of their ships were destroyed, and merchandise to the value of \$300,000 was captured.

In 1626 the Spaniards from the Philippines made a settlement upon the island of Formosa, but it was neglected, and in 1642 fell into the hands of the Dutch, who held it until they were driven out by the Chinese about twenty years later.

INFLUX OF CHINESE TRADERS.

With a view to the development of the commerce of the islands Legaspi encouraged the Chinese traders and passed protective measures for their benefit. Previous to this the dealings of Chinese traders had been conducted on board their junks, and even that precaution did not save them from being occasionally boarded and pillaged by the natives. In time the Chinese gained sufficient confidence to come ashore with their wares, and before the close of the sixteenth

century they were paying rent for the land they occupied.

As the numbers of Chinese merchants in Manila grew, the Government provided them with a large building, which was called the Alcayceria. This was a large square of shops with a dwelling room above each. It was opened in 1580 in the section of Binondo. Later on, when the Chinese had outgrown the Alcayceria, another and much larger center was provided for them. This was the celebrated Parian, or market place, which was demolished by order of the Government in 1860.

In the middle of the sixteenth century the Spaniards were alarmed by the threatened invasion of the Chinese who had wrested Formosa from the Dutch settlers. The apprehension of the residents of Manila was increased by the presence in their midst of a large body of Mongols with whom no ties had been formed. With a view to disposing of this internal danger before the arrival of the expected enemy, the Chinese traders of the Parian were incited to an act of violence. This was made the pretext for turning artillery upon the quarter. A great number, probably thousands, of the Mongols were killed in the assault that followed. In the opinion of Juan de la Concepcion it had been the original intention of the Spaniards to slaughter all the Chinese, who numbered about ten thousand, but they were restrained by the thought of the loss to themselves that would inevitably

ensue, for, as the historian says, "without the trade and commerce of the Chinese these dominions could not have subsisted."* In addition to the foreign trade which was conducted by them, almost all the mechanical industries of Manila were in the hands of the Chinese.

In 1603 a serious uprising of the Chinese occurred. It seems impossible to learn the true cause that led to this appalling affair, but it would appear that the rapid growth of the Mongol colony had excited the apprehensions of the Spaniards with whom the fear of a Chinese invasion was a periodical nightmare from the time of Li Ma Hung's incursion. On this occasion a crisis was reached when two mandarins arrived in the Philippines as ambassadors from the Emperor of China. After their departure preparations for defense were pushed with feverish haste. Troops were drilled, arms and artillery were overhauled, and the natives were ordered to carry their weapons constantly. The Chinese in Manila looked upon these preparations as a menace to themselves, as no doubt they were, and proceeded to raise fortifications outside the city. Finally the frightened Chinese began hostilities by burning houses in the suburbs and threatening the city. Of a picked body of one hundred Spanish troops led by an ex-governor-

**Historia General de Philipinas*. Juan de la Concepcion. 14 Vols. Manila, 1788. De la Concepcion estimates the number of Chinese in the Philippines in 1638 at 33,000.

general, which was sent against them, hardly one escaped with his life. Elated by this victory, the Chinese proceeded to lay siege to the city, and a long struggle ensued, in which they were finally repulsed and fled. They were pursued for miles, and utterly scattered. It is said that upwards of eighteen thousand Chinese were slain in this uprising. In 1639, and again in 1660, similar outbreaks occurred, and were only quelled after thousands of the Orientals had lost their lives.

In 1755 it was resolved to expel and to exclude all non-Christian Chinese. Before the date of its execution this decree was evaded by a large number, who became baptized, or signified their intention to do so. The order of expulsion was enforced against upwards of two thousand residents, and for a time newcomers were rigidly excluded.

In 1763 the Chinese joined the British invaders, and as a consequence great numbers of them were killed in the provinces where the Spaniards retained control of the country.

Foreman* says: "Except a few Europeans and a score of Western Asiatics, the Chinese who remained were the only merchants in the Archipelago. The natives had neither knowledge, tact, energy, nor desire to compete with them. They cannot at this day do so successfully, and the Chinese may be considered

*The Philippine Islands. John Foreman, F. R. G. S. New York, 1899.

a boon to the colony, for without them, living would be much dearer, commodities and labor of all kinds more scarce, and the export and import trade much embarrassed. The Chinese are really the people who gave to the natives their first notions of trade, industry, and fruitful work. They taught them, amongst many other useful things, the extraction of saccharine juice from sugar-cane and the working of wrought iron. They introduced into the colony the first sugar-mills with vertical stone crushers and iron boiling-pans."

The history of the last hundred and fifty years shows that the Chinese, although tolerated, were always regarded by the Spanish colonists as an unwelcome race, and the natives have learned from example to despise them. From time to time, especially since the year 1763, the feeling against them has run very high.

During the nineteenth century the status of the Chinese was much improved. Many of them have adopted Christianity and have married native women. Important Government contracts have at times been made with Chinamen, and some few have received public recognition in the form of decorations and titles.

Their numbers have steadily increased since the enactment of the exclusion law in the eighteenth century, many ways of evading which have been devised by the wily Oriental. That the influx has continued

during recent years is shown by the Census return of over forty thousand Chinese of foreign birth.

THE SPANIARDS COME INTO CONTACT WITH THE MOROS.

During the early years of the Spanish occupation no attention was paid to Mindanao and the Sulu Archipelago, and the Moros on their part seemed to have refrained from encroaching upon the islands under Spanish control. In 1596 a Portuguese* adventurer obtained the royal sanction to attempt the conquest of Mindanao. The expedition, which consisted of one vessel carrying men-at-arms and the invariable complement of priests, ended disastrously. The commander and several of the soldiers were killed and the ship returned to Manila, having accomplished nothing more than arousing the resentment of the Muhammadans.

From this time commenced the troubles with the southern natives, which continued over a period of two hundred and fifty years. Hitherto the piracy, which was the chief occupation of those people, had been confined to the waters adjacent to their own territory, but they now began to extend their depredations to the northern islands. The sultans of Mindanao and Sulu entered into an offensive and defensive alliance against the Spaniards and co-operated

*From 1581 to 1640, Portugal was an appanage of the Spanish Crown.

in the organization of piratical expeditions. They never lacked for men to man their ships from a population of sea-faring freebooters by heredity, and they were well armed. No portion of the Archipelago was free from the incursions of the Muhammadans, who swooped, in their war junks, upon coast towns, plundered and burned, and were at sea again before any punitive force could reach the spot. The principal part of their booty consisted of captives who were carried into slavery. Among these were sometimes white men, and priests were regarded as particularly desirable prizes.

These depredations seriously impeded the development of coast towns and inter-island traffic. The effects were especially severe in the Visayas, some of the islands of which were almost depopulated in consequence, and all of their inhabitants were reduced to a condition of abject poverty, so that the Government was more than once constrained to remit all taxes. Each succeeding governor essayed the task of suppressing these marauders. Countless expeditions were despatched against them. They were attacked on land and at sea. A garrison was maintained in Mindanao at great expense. All these measures proved ineffectual to suppress the scourge, and it was not until the introduction of gunboats that the Spaniards succeeded in getting the upper hand. The Moros were never, however, subdued by the Spaniards. Some of the chiefs made nominal submission

LOMA CHURCH.

This is one of the churches that were originally built with an eye to defense, as may be seen from the high port-like windows and thick walls. It was the scene of hard fighting in the Tagalog Rebellion.

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while retaining actual independence, and several campaigns were conducted in Mindanao during the last twenty years of Spanish occupancy of the Philippines.

THE BRITISH TAKE MANILA.

In 1762 England declared war against France and Spain, and a British fleet was despatched to the Philippines. It arrived in September of that year under Admiral Cornish, with General Draper in command of the troops. The British squadron anchored in Manila Bay and two officers were sent ashore to demand the surrender of the city, which was refused. The entire garrison of Manila at the time consisted of six hundred soldiers with eighty pieces of artillery, whilst the British force numbered three thousand seamen, fifteen hundred European soldiers, and about a thousand Sipahis.

Troops were landed from the British vessels and a siege and bombardment of the city commenced. During the first week of the attack the defenders were reinforced by five thousand native troops, with whom an assault in three columns upon the British positions was made. They were beaten back with loss and the natives dispersed through the province. On the 5th of October the British troops entered the walls of the city and upon the following day Manila was given up by the Archbishop, who was acting-Governor at this time. By the terms of this capitulation the

entire Archipelago was surrendered and an indemnity of four millions of dollars was agreed upon. The day before the capitulation a judge of the Supreme Court, named Simon de Anda y Salazar, escaped in a native boat and fled to the Province of Bulacan, where he proclaimed himself Governor-General, and affected to ignore the action of the Archbishop. Simon de Anda raised troops among the natives and carried on a guerilla war until the British evacuated the islands, which they did early in 1764.

During the period of something more than a year of British occupancy, Luzon was in a condition of extreme disturbance. In the provinces lawlessness was rampant and necessarily unchecked. It was some years before the effects of this violent disturbance of the administration of government had subsided.

The most notable of these affairs was the rising in Ilocos Sur under the leadership of one Diego de Silan, a native Christian. The city of Vigan was taken and sacked; the friars were held for ransom and the surrounding neighborhood was pillaged. Silan made his headquarters at Vigan and issued a manifesto in which he declared that Jesus of Nazareth was Captain-General of the district and that himself was His *Alcalde*. Silan sent a messenger to Manila conveying his acknowledgment of the sovereignty of the King of England, and the British Governor seems to have appointed him *Alcalde Mayor*.

This rebellion was only suppressed with the assassination of Silan in May, 1763.

The Island of Luzon was not pacified until 1765, after the Spaniards had lost, according to Zuniga,* seventy of their countrymen and one hundred and forty native soldiers. The rebels are said, by the same authority, to have lost ten thousand lives in these uprisings.

The conduct of Simon de Anda during this crisis in the affairs of the Colony met with the approval of the King, and a few years afterwards he was appointed Governor-General. His first act was to wreak vengeance upon all who had opposed him in his self-constituted authority and upon others with whom his uncontrollable temper and imperious disposition had brought him in conflict. He imprisoned several military officers and officials, and others he sent back to Spain. He quarreled with the clergy, and in fact created enemies on all sides. The consequent spirit of unrest and hostility to the Executive spread from Manila to the provinces, and the term of Anda, which expired with his death in 1776, was marked by a num-

* "Estadismo de las Islas Filipinas o mis viajes por este pais, por el Padre Fr. Joaquin Martinez de Zuniga, Augustino calzado. Publica esta obra por primera vez extensamente anotada, W. E. Retana. Two Vols., 1893. Although written in 1803 and drawn upon by later writers, notably Buzeta, this valuable book remained in manuscript form for ninety years.

ber of riots and rebellions in different parts of the island.

UPRISINGS OF THE NATIVES.

The entire period of Spanish occupation of the Archipelago was marked by revolutionary movements and uprisings of more or less gravity in different parts of the islands. There were numerous causes for the spirit of discontent that led to these disturbances. Amongst the most important may be mentioned the system of *encomiendas*; conscription for military service; enforced labor for the Government without remuneration; taxation and compulsory contributions to the Church; the conduct of the friars and their exactions; and the maladministration of Spanish minor officials in the provinces. These causes led through many minor movements of a similar character in a gradually rising tide of rebellion to the Tagalog outbreak in 1896.

In 1622 the natives of the island of Bohol broke into resistance to the missionaries. They burned several churches and otherwise inflicted damage upon the towns before they were subdued. A more serious rising in 1744 in the same island is said to have been occasioned by the tyranny of a priest who arrogated to himself the powers of a magistrate and caused natives to be confined at his pleasure. It seems that the priest had ordered the body of a native to lie unburied until it decomposed. The

brother of the latter, a man named Dagohoy, killed the priest in revenge and raised the standard of revolt.

A large number of disaffected natives joined the rebel, and the band maintained its independence for thirty-five years, during which time the Government frequently found it necessary to send troops against them. Finally Dagohoy and his followers surrendered on condition of receiving a full pardon.

Leyte was the scene of an insurrection in 1622, when it became necessary for the Governor of Cebu to reinforce the local Governor with forty vessels and troops before peace could be restored. In 1649 the Governor-General decided to press natives of Samar into service at the Cavite Arsenal. The result was a serious uprising under a native named Sumoroy. The rebels killed a priest and burned several churches before they took to the hills. This outbreak was only crushed with difficulty and not until the leader had been betrayed by some of his own people.

The riots of 1649 extended to other provinces for the same reason. In Albay the natives rose; in Masbate Island they killed a Spanish officer; a priest was murdered in Zamboanga; a Spaniard was assassinated in Cebu; and several Europeans lost their lives in Caraga and Butuan. In 1660 the natives of Pampanga and Pangasinan broke into revolt as the result of an order to cut timber for the Government. The insurgents formed three bodies aggregating upwards

of ten thousand armed men under the leadership of "King" Malong. Ilocos province declared for the rebel chief and furnished him with a body of recruits. Reinforcements came in from every hand until Malong was enabled to take the field with forty thousand followers. Against this formidable uprising the Spaniards sent several detachments of troops and a flotilla of armed vessels. The insurgents were routed at all points and their leaders hanged.

In 1823 a body of native troops, headed by a creole officer named Novales, attempted to seize the capital and subvert the Government. In 1827 Cebu and several other towns of the island were the scenes of violent outbreaks, and in 1844 the Governor of Negros Island was killed in a rising due, it is said, to the forced employment of State prisoners on the Governor's private account.

What is known as the Cavite Insurrection occurred in 1872. A portion of the native troops was implicated in this affair. They took possession of the Arsenal expecting to be supported by their accomplices in Manila, but through some misunderstanding as to the signal for the uprising the plan for co-operation failed. The mutinous soldiers were soon suppressed.

For alleged complicity in this affair Doctor Joseph Burgos and three other native priests were executed and several native clergy and laymen were banished from the country. The victims had made themselves

odious to the Spanish clergy by demanding the enforcement of the enactments of the Council of Trent, which would have required the friars to retire from their incumbencies to monastic life.

There appears to be evidence that the friars instigated the Cavite outbreak with a view to inculcating the native priests.

THE PASSING OF SPANISH DOMINION.

IV.

THE PASSING OF SPANISH DOMINION.

Birth of the Katipunan—The Patriot of the Philippines—The Tagal Rebellion—War with the United States—The Treaty of Paris—The Form of Spanish Administration—The Encomenderos—The Alcaldes—The Provincial Governors—Municipal Officials—The Audencia—Inadequate Reforms—The Judicial System—The Tardiness of Legal Processes.

The severity of the Government in meting out punishment to those suspected of implication in the Cavite disturbance had a deep and lasting effect upon the natives. They knew that it was due to the insistence of the friars, who had by this time established so complete an influence over the civil authorities that the former were justly held responsible for most of the abuses under which the people suffered. The ecclesiastics were the open opponents of reform, and from the inception of the Colony had thwarted most movements in that direction, whether emanating from the local, or the national, government. Toward the close of the Spanish *régime* in the islands, the friars had become fully aware of the widespread hatred for themselves, which existed among all classes of the natives. The knowledge seems to have goaded them to a greater display of arrogance and to wholesale reprisals against all whom they knew or suspected to be inimical.

Freemasonry had been introduced to the Philippines about ten years before the Cavite outbreak. The Roman Catholic Church is everywhere opposed to secret societies, and to the Freemasons most of all.

BIRTH OF THE KATIPUNAN.

The Insular lodges soon turned into political organizations, and thus incurred the extra antagonism of the priests. The majority of those executed, and those exiled, on account of the Cavite insurrection were members of the Masonic body. Out of the Freemasons grew a number of independent societies, each more radical than its predecessors, culminating in the Katipunan. The members of this order were Tagals, mostly in the ranks of the working people; determined, desperate men, who had nothing but their lives to lose. Their purpose was "to redeem the Philippines from its tyrants, the friars, and to found a communistic republic." In 1896 the Katipunan probably numbered about fifty thousand members. It was the inciting factor in the Tagal Rebellion and the backbone of the movement.

In 1895 and 1896 the authorities adopted the most severe measures to suppress the Katipunan, with precisely the reverse effect to that intended. The friars, who often acted in the capacity of detectives for the civil power, caused the deportation of great numbers of suspects.

Without entertaining the sentiment of patriotism

in the broader sense, the Tagal has always evinced strong attachment to the soil and no penalty, short of death, could be more severe than exile from his native village.

Sawyer* says: "The greatest and the best-founded complaint of the natives against the priests was that whoever displeased them, either in personal or money matters, was liable to be denounced to the authorities as a filibuster, and to be torn from home and family and deported to some distant and probably unhealthy spot, there to reside at his own cost for an indefinite time by arbitrary authority, without process of law. Such a punishment, euphoniously termed 'forced residence,' sometimes involved the death of the exile and always caused heavy expense, as a pardon could not be obtained without bribing some one."

THE PATRIOT OF THE PHILIPPINES.

The most notable victim of this system of lawless persecution was Rizal, the hero patriot of the Philippines, who suffered deportation, and ultimately death, as a result of the machinations of the friars.

Jose Rizal y Mercado was born about the year 1865, at Calamba, in Laguna Province. His father, a Filipino of some means, was able and anxious to afford him all possible facilities for acquiring a liberal education, especially after the boy had displayed

* The Inhabitants of the Philippines. F. N. Sawyer. New York, 1900.

unusual talent and application under the instruction of the Jesuits at Manila. He was sent to the University of Madrid, from which he secured the degree of Doctor of Medicine and Philosophy. Later he prosecuted his studies in Paris and at various German universities, not without imbibing something of the socialistic ideas that pervaded those institutions at the time. The unhappy condition of his native land was the subject of Rizal's constant concern, and he pondered deeply upon the problem of its deliverance from the thralldom of the friars. Neither then, nor at any later time, does Rizal appear to have harbored any treasonable thoughts against the Spanish Government. Indeed, his last voluntary act was an exhibition of loyalty. But in his early years he became firmly convinced that the future prosperity of the Philippines depended upon its freedom from the domination of the friars, and he was ready to support any movement having that object in view.

During Doctor Rizal's stay in Germany he published a romance entitled "*Noli me tangere*," in which the priests of the Philippines were depicted in an unattractive light and their worst practices exposed. This was followed by another political novel on somewhat similar lines. The books were written in Spanish and were doubtless widely read amongst the class which was held up to odium in them.

Upon his return to the islands, shortly after the publication of these works, Rizal further excited the

enmity of the ecclesiastical body by disputing the title of the Dominican Order to certain lands which they occupied in his native town. He also allied himself with other patriots of similar disposition and founded the "*Liga Filipina*," a secret society, most of the members of which were Freemasons. The principal article of their program was the "expulsion of the friars, and confiscation of their estates."

At length it became patent to Rizal that his safety depended upon leaving the country. He returned to Europe, and during his absence his relatives and the chief families of Calamba were evicted without notice or compensation from the holdings they rented from the religious order.

In 1893 Rizal took up his residence in Hong Kong with the intention of following his profession. He appears to have received the assurance of the Governor-General, through the Spanish Consul, that he might return to the Philippines with confidence as to his personal safety. It is hardly probable that without some such guarantee he would have ventured to land openly at the capital and less probable that he would have included in his luggage revolutionary literature. However, he was immediately arrested upon the charge that the Custom House officers had discovered seditious proclamations amongst his effects.

Rizal was tried and sentenced to an indefinite term of "enforced residence" at Dapitan, on the north

shore of Mindanao Island. In July, 1896, he petitioned the Governor-General to be permitted to go to Cuba and serve the Government as an army doctor. His request was granted, and he proceeded to Manila, arriving, by unfortunate chance, just as the Rebellion broke out. Ere this the name of Rizal had become a power with his countrymen, and his exile had strengthened, rather than relaxed, his hold upon their memories and affections. Emilio Aguinaldo had not yet come into the public view, and there was at this time no Filipino whose influence over the masses could have been as great as that of Rizal. His presence in the capital at this juncture excited the apprehension of the authorities and he was shipped to Spain at the earliest possible opportunity.

In view of succeeding events it is well to note that Rizal carried commendatory letters from Governor-General Blanco to the Minister of War and to the Minister of the Colonies. They were similar in strain and recited that: "I recommend to you with real interest Dr. Jose Rizal, who leaves for the Peninsula to place himself at the disposal of the Government as volunteer army doctor in Cuba. His conduct during the four years he has been in exile in Dapitan has been exemplary, and he is, in my opinion, the more worthy of pardon and benevolence, because he is in no way associated with the extravagant attempts which we are now deploring, neither in conspiracy nor in the secret societies which have been formed."

Had he wished, Rizal might have left the steamer at Singapore as his companion and fellow-patriot Rojas did.

Upon his arrival at Barcelona, Rizal was arrested and confined in the fortress of Montjuich. Charges had been formulated against him by his relentless enemies, the friars, and cabled to the authorities in Spain. At the close of the year 1896 Rizal, a closely guarded state prisoner, was handed over to the Insular jurisdiction. By this time Blanco, whose humanity and sense of justice would at least have prevented the judicial murder of Rizal, had been recalled at the behest of the ecclesiastical party. Polavieja was at the head of the Insular Government and the country was under martial law.

Rizal was hastily brought before a court-martial on the charges of sedition and rebellion. The testimony adduced by the prosecution was of the flimsiest character, and was amply refuted by Rizal, who conducted his own defense with ability and eloquence. Considering the fact that he had been virtually a state prisoner for close upon five years and that it was physically impossible for him to have taken any active part in the rebellion, it is difficult to see how the charges could have been substantiated. Nevertheless, Rizal was convicted and sentenced to be shot. The execution was carried out on the last day of the year 1896.

The death of Rizal was one of several similar acts

in which the priests allowed their hatred to get the better of their judgment, and brought upon themselves a copious harvest of vengeance. The affair created a more profound impression upon the Filipinos than even the execution of Doctor Burgos.

THE TAGAL REBELLION.

In August, 1896, the smouldering fire of discontent burst into flame. At the time of the outbreak of the Tagal Rebellion, General Blanco, the Governor-General, had but fifteen hundred European troops and six thousand native auxiliaries at his command. Of the former only seven hundred were in Manila and the loyalty of the latter was doubtful. Under these circumstances the General was forced to confine his operations to the defense of the city, around which several skirmishes took place during the first few months following the inception of the rebellion. Meanwhile the rebels were making good use of the respite. They established their headquarters in Imus, of the province of Cavite, which became the most important center of the rebellion.

In November Blanco had received from Spain additions to his force, which brought the European contingent up to ten thousand, and he began to extend his operations, but he was recalled before any considerable headway had been made against the insurrection.

In the meantime the prisons of Manila were

crowded with natives suspected of sympathy with the insurgents. All process of law was disregarded in their arrests, and their disposition by court-martial was equally summary. This military tribunal is strongly suspected of extortion in collusion with some of the civil authorities. Hundreds of the wealthiest natives and *mestizos* of Manila were brought before it and many of them are known to have purchased their release, in some instances only to go through the process again in a few weeks' time. Shiploads of prisoners were consigned to the Caroline Islands, Fernando Po, Ceuta, and other penal colonies. The Manila volunteers were allowed to make domiciliary searches without warrant and to perpetrate the worst kind of outrages upon native residents of both sexes. Numbers of suspects were executed without trial and not a few were tortured so that they became cripples for life. In fact, the acts of officials during this reign of terror equaled the deeds of the Inquisition at its worst.

In December, Blanco was succeeded by General Polavieja, who brought with him two thousand fresh troops and who was rapidly reinforced until the number of European soldiers under his command amounted to twenty-eight thousand.

Several engagements were fought with the result that the insurgent forces in Cavite were dispersed after fifty-two days of hard and continuous fighting. The scene of the insurrection now shifted to the north

of Manila. During the operations in Cavite a half-caste named Llaneras had raised a body of a few thousand in the provinces of Pampanga and Bulacan and had contrived to withstand the Spanish force sent against him. He was now joined by Aguinaldo with the remnant of the rebel army from the south. Immediately following the junction of the two chiefs the area of rebellion spread over the provinces of Pangasinan, Zambales, Nueva Ecija, Tarlac, and Ilocos. Meanwhile General Polavieja had retired on account of failing health and his place was taken by General Primo de Rivera.

In July, 1897, the rebels circulated a proclamation in which was set forth their demands as follows:

1. Expulsion of the friars and restitution to the townships of the lands which the friars have appropriated, dividing incumbencies held by them, as well as the episcopal sees, equally between Peninsular and Insular secular priests.

2. Spain must concede to us, as she has to Cuba, Parliamentary representation, freedom of the press, toleration of all religious sects, laws common with hers, and administrative economic autonomy.

3. Equality in treatment and pay between Peninsular and Insular civil servants.

4. Restitution of all lands appropriated by the friars to the townships, or to the original owners, or, in default of finding such owners, the State is to put them up to public auction in small lots of a value

within the reach of all and payable within four years, the same as the present State lands.

5. Abolition of the Government authorities' powers to banish citizens, as well as all unjust measures against Filipinos; legal equality for all persons, whether Peninsular or Insular under the civic as well as the Penal Code.

The conflict dragged on without prospect of termination. Each day made it more clear to the Governor that, even if the rebels failed to make any headway, they could at least hold out indefinitely. In this dilemma General Rivera decided to resort to diplomacy. He employed a Filipino, named Pedro Paterno, to open negotiations with the insurgent chiefs. After *pourparlers* extending over three or four months the *Pacto de Biac-na-bato* was signed, December 14, 1897, between Emilio Aguinaldo and other chiefs, representing the rebels, and Pedro A. Paterno, as attorney for the Captain-General. The terms of this agreement remain in dispute. The insurgents, whilst charging the Spaniards with bad faith in the matter, never published anything purporting to be a literal copy of, or extract from, the compact. The Spaniards have always claimed that the monetary consideration was the only one conceded. The insurgents have persistently maintained that reforms and a general amnesty were conditions of their surrender, and it seems highly probable that the latter at least must have been promised

to them. It is a singular fact that the originals of this treaty have never seen the light. The most likely hypothesis appears to be that the Governor-General cunningly inserted a clause to the advantage of the rebel leaders which they dared not divulge to their followers, and that the Spaniards, having broken their part of the compact, were equally concerned in keeping the details of it secret.

The insurgents gave up their arms and on the 27th of December, 1897, Aguinaldo and thirty-four other leaders embarked for Hongkong. One instalment, representing about one-fifth of the total amount of money promised, was all that the insurgent leaders ever received. A wholesale persecution of those who had taken part in the rebellion followed the surrender and many executions took place.

WAR WITH THE UNITED STATES.

War was declared between Spain and the United States on the 23d of April, 1898. In Manila preparations were made in feverish haste to withstand the American fleet which was known to be at Hongkong. The defenses of the city were in a lamentably deficient state. The land batteries were short of their complement of guns and such as were mounted were out-of-date and encrusted with rust. Material for constructing mines was lacking and the torpedoes on hand proved to be defective and useless. Augusti, who had succeeded Rivera as Governor-General, issued a bom-

bastie proclamation in which he characterized the Americans as a composition of "all the social excrescences," and declared their squadron to be "manned by foreigners possessing neither instruction nor discipline." He sought to lull the apprehensions of the citizens with this assuring declaration: "The aggressors shall not profane the tombs of your fathers, they shall not gratify their lustful passions at the cost of your wives' and daughters' honor, or appropriate the property that your industry has accumulated as a provision for your old age. No! they shall not perpetrate any of the crimes inspired by their wickedness and covetousness because your valor and patriotism will suffice to punish and abase the people who exterminated the natives of North America instead of bringing to them the life of civilization and progress."

The American fleet entered Manila Bay at three o'clock on the morning of May the first, and found the Spanish squadron ranged round the point of the peninsula of Cavite. The Spaniards, under Admiral Montojo, displayed the utmost bravery, but they were completely outmatched, and by eleven o'clock every one of their vessels was either destroyed or disabled. Admiral Dewey's demand for the surrender of Manila met with a refusal, but Cavite was evacuated and the Americans took possession of the arsenal and forts. There is no doubt that the Spaniards might easily have been shelled out of Manila, but in that case they would most assuredly have been massacred by

the insurgents, large bodies of whom hemmed the city in on all sides, for Admiral Dewey had neither troops to hold the capital nor to overpower the rebels in case of a conflict with them. Throughout the succeeding operations not the least difficult task of the American commanders lay in preventing the Spaniards from falling into the hands of their enemies.

Believing that Aguinaldo might be usefully employed in controlling the insurgents, Admiral Dewey had brought him from Hongkong and he, with other leaders, was now landed and supplied with arms and ammunition. With thirty thousand rebel troops Aguinaldo laid siege to Manila, whilst the American squadron blockaded the port. For three months, and until the arrival of the American generals with reinforcements, Aguinaldo's force contrived to repel all sorties from Manila and to cut the city off from outside communication. In the provinces the Spaniards were almost everywhere defeated and large numbers were taken prisoner. By the middle of June two-thirds of Luzon was in the possession of the rebels, and on the 18th of that month Aguinaldo summoned deputies to a congress and formed what was called the Revolutionary Government. This body administered a large portion of the island, maintained order, and collected taxes. Upon the 12th of August, 1898, the Protocol providing for the appointment of commissioners to conclude a treaty of peace was signed in Washington. Upon the night of the same date the

FILIPINA WOMEN.

These are typical full-blooded Tagals in the universal costume of the better class. The portraits are those of two school-teachers.

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Spaniards made an attack in force upon the American lines without the city and some hours of fierce fighting ensued. On the following day the combined land and sea forces of the Americans, with the co-operation of the insurgent army, made a vigorous attack upon the city. About mid-day Manila surrendered and terms of capitulation were negotiated between General Greene and General Jaudenes, the rhetorical Augusti having fled aboard a German cruiser before the cessation of fighting. The articles of capitulation included the surrender of the Philippine Archipelago.

Previous to the attack upon the capital the American commander instructed Aguinaldo that his troops would not be permitted to enter the city, and the prohibition was continued in force after Manila fell. A few days later a provisional agreement was entered into, by the terms of which the Americans retained jurisdiction over Manila and the surrounding districts whilst the rest of the island remained under the control of the Revolutionary Government.

Aguinaldo selected Malolos for the temporary capital of the insurgent government, and a Congress convened there on the 15th of September. Pedro A. Paterno was elected President and Deputies Legardo and Ocampo were elected Vice-President and Secretary respectively. One of the first decrees of this Congress imposed compulsory military service upon every able-bodied Filipino over the age of eighteen.

Aguinaldo was retained in the position of Generalissimo with a salary of \$25,000 and an allowance of \$50,000 for expenses. The proceedings of this Congress indicate that its members confidently expected that the independence of the Philippines would be a provision of the pending treaty of peace, or follow their cession to the United States.

THE TREATY OF PARIS.

The treaty of peace between the United States and Spain was signed at Paris by the respective commissioners on the 10th day of December, 1898, and ratified by their governments a few months later. Spain agreed to cede to the United States the Philippine Archipelago in consideration of receiving \$20,000,000. Article 8 of the Treaty declares that "the abandonment and cession stipulated shall in no way affect the property and rights accorded by custom or law to the peaceful holders of goods of any sort in the provinces, cities, public or private establishments, civil or ecclesiastical corporations, or any other collectively which has any legal right to acquire goods, or rights in the ceded or abandoned territories, and the same applies to the rights and properties of individuals of every nationality whatsoever."

Article 9 recites that "Spanish subjects born in the Peninsula and resident in the territories, the sovereignty of which Spain abandons, or cedes, may remain in, or go away from, those territories and still hold,

in either case, their property rights as well as the right to sell, or dispose of, the real estate, or its produce. They shall also have the right to follow their trades, or professions, subject to the laws affecting all other foreigners."

It is easy to comprehend the grief and anger with which the Filipinos learned the terms of the Treaty of Paris. Apparently the friars were as firmly entrenched as ever. The Americans had given them a title to the lands which the natives protested had been stolen from their rightful owners. Their arch-enemy with whom they had struggled for many years appeared to have the support of the powerful Government of the United States, for no intimation of the ultimate action of the American authorities in the disposition of the friars' lands had as yet been given.

The insurgent leaders were thoroughly disgusted with the turn of events, and it must be confessed that they had no little ground for their discontent. The money which they had received from the Spanish Government (\$400,000) as a condition of surrender in 1897, had been carefully husbanded for the future struggle that they anticipated and had been expended in their operations supporting the American invasion. There is no doubt that someone, who they had reason to suppose was authorized to speak for the American Government, had assured the *Junta Patriotica* in Hongkong that they might look for the independence

of the Philippines to follow American success in wresting the islands from Spain. The expectations of the Filipinos were strengthened by Admiral Dewey's action in bringing Aguinaldo and his lieutenants to Manila in an American war vessel; in supplying them with arms; and in employing them in the ensuing campaign. The services rendered by the insurgents during the three months that the American fleet lay in Manila Bay, quite unable for lack of troops to take advantage of the naval victory, should not be lightly estimated. Even after the arrival of reinforcements from America, the revolutionary forces afforded valuable assistance in the reduction of the city and afterwards in holding the island and maintaining order.

To have granted independence to the Philippines at that time would have been to visit the people with a greater misfortune than a continuance of the rule of the friars, and it is well that the American Government did not entertain either idea. But it can hardly be questioned that both policy and justice demanded prompt and substantial recognition of the services of the leaders in the Filipino rebellion. Had this been done it is probable that Aguinaldo and his companions could have been induced to lay down their arms and to submit to the authority of the American Government. That they continued the contest for the possession of their country—a contest in which they had already sacrificed fifty thousand lives—is

not to their discredit. Senator Hoar, addressing Congress on the subject, said: "Mr. President, there is one mode by which the people of the Philippine Islands could establish the truth of the charges as to their degradation and incapacity for self-government which have been made by the advocates of Imperialism in this debate, and that mode is by submitting tamely and without resistance to the United States."

There had been serious friction, bordering at times upon open rupture, between the American and insurgent troops from the time of the arrival of the former, but it was not until February, 1899, that the ill-advised and hopeless armed opposition of the Filipinos to the United States Government began. It is impossible to determine the responsibility for the immediate outbreak. Each side accused the other of undue precipitancy and aggravation, but the question is of little consequence.

The subjugation of the *insurrectos* was accomplished under extreme difficulties. The native troops maintained a guerilla war for years, retreating to the mountains, or the jungle, when pressed, and only attacking in overwhelming numbers. The capture of Aguinaldo broke the back of the resistance, and although a few armed bodies remained at large in different parts of the Archipelago, the Philippine Commission was able to certify on September the 11th, 1902, that "The recently existing insurrection of the Philippine Islands has ceased and a condition of

general and complete peace has been established therein." At this point it may be well to sketch in outline the system of administration under the Spaniards. We shall thereby gain some idea of the task which was presented to the American Government upon taking over the islands, the extent of its achievement up to the present, and the difficulties yet to be overcome.

THE FORM OF SPANISH ADMINISTRATION.

The supreme head of the Spanish administration of the Philippines was the governor-general. The commission of Legaspi authorized him to exercise judicial functions, to "hear, examine, and decide any civil, or criminal suit, and to administer over civil and criminal justice, in company with the officers of justice who may be appointed." For many years the judiciary formed a part of the executive government and always exercised considerable influence upon its actions.

The governor-general was invested with despotic powers. He might remove any official at will, and expel any person from the islands. On the other hand, unless these powers were exercised in accordance with the will of the priests, the governor-general's tenure of office was likely to be cut short, and so if he endeavored to suppress the dishonesty and malfeasance of the civil officials. The term of office of the governor-general was three years, with a salary

of \$40,000 per annum, and liberal allowances. This, like all other appointments in the Philippines, was subject to wire-pulling and bribery in Madrid. During later years all the civil posts in the islands were systematically farmed by the members of the Cortes and other influential persons at the Spanish capital.

THE ENCOMENDEROS.

As the country yielded to the Spaniards it was divided into provinces and military districts and these in their turn into *encomiendas*, patterned after the *repartimientos* of Spanish America. The holders of these sections of territory collected the Government tribute and as much else as they could exact from the natives on their own account. They practically held the *tributos* in slavery and subjected them to the grossest cruelties. Bishop Salazar wrote to the King in 1583 regarding the *encomenderos*, "They collect tribute from children, old men, and slaves, and many remain unmarried because of the tribute, while others kill their children. . . . But the end is not here, but in the manner of collecting, for, if the chief does not give them as much gold as they demand, or does not pay for as many Indians as they say there are, they crucify the unfortunate chief, or put his head in the stocks. . . . What the *encomendero* does after having collected his tribute in the manner stated is to return home and for another year he neither sees nor hears of them. He

takes no more account of them than if they were deer until the next year, when the same thing occurs." There is some satisfaction in the knowledge that several of the *encomenderos* fell victims to the wrath of the miserable *tributos*.

THE ALCALDES.

The *encomenderos* were succeeded by *alcaldes*, whose rule was less inhuman only because greater restraint was placed upon them. They had not, like their predecessors, the right to the fruits of the natives' toil, but they enjoyed the "*indulto de comercio*" or privilege of trading. This indulgence was never intended to act as a restriction upon the operations of the natives, but the *alcaldes* made it the medium for exercising a virtual monopoly and forced the natives to conduct all their transactions with them.

The office of *alcalde* carried with it a salary of \$300 a year and upwards. From this sum, however, taxes were deducted and the annual fee for the *indulto*, which usually amounted to nearly as much as the entire salary. Nevertheless the office of *alcalde* was much sought after and high prices were paid for the appointment. Mazonia stated, in 1840, that: "There are candidates up to the grade of Brigadier who relinquish a \$3,000 salary to pursue their hopes and projects in Governorship." The *alcaldes* often found an additional source of profit in the collection of the Royal tribute. Silver being scarce in the in-

terior the natives were frequently obliged to make payment in grain, or other produce. This the *alcalde* accepted at an arbitrary appraisement very much below the actual value and in accounting to the central authority made a personal profit of the difference.

These men, to whose hands the functions of government and the administration of justice were entrusted, were generally ignorant, often brutal, and never honest. In 1810 Tomas de Comyn had the following to say of the *alcaldes*: "In order to be a Chief of a Province in these islands no training, or knowledge, or special services are necessary; all persons are fit and admissible. . . . It is quite a common thing to see a barber, or a Governor's lackey, a sailor, or a deserter, suddenly transformed into an *alcalde*, Administrator, and Captain of the forces of a populous province, without any counsellor but his rude understanding, or any guide but his passions."

In 1844 a Royal Decree prohibited future trading on the part of any Government officials but the administration of the civil rule of provinces remained in the hands of *Alcaldes-Mayores*, who exercised executive and judicial functions. The situations sometimes arising out of this anomalous condition might have furnished material for the *libretto* of a comic opera. The *Alcalde-Mayor* issued an order in his capacity of Governor. A protest was made to himself in the capacity of Judge. The Judge supported the

Governor, and an appeal was taken to the central authority in Manila. The central authority referred the matter back to the *Alcalde-Mayor* for a report upon the actions of the Governor and the Judge. The only result of this circumlocutionary proceeding was to put the composite official in possession of a list of complainants upon whom he could visit his displeasure.

In 1886, a much-needed reform was effected by the appointment of Civil Governors and the restriction of *Alcaldes* to judicial duties. Each Governor was provided with an assistant, who was styled Secretary, and whose most important duty was to act as a check upon his superior.

THE PROVINCIAL GOVERNORS.

The Provincial Governor was the representative of the Governor-General; whose edicts he was expected to publish and enforce. He was charged with the maintenance of order and the control and direction of the Civil Guard and local constabulary. He was responsible for the proper performance of the duties of the petty municipal authorities, and he could remove them at discretion. As chief of the police force, it was his duty to cause the arrest of suspicious persons and law-breakers, but he was bound to bring the suspect, or offender, before the judicial authority within three days of his seizure. The Governor had the powers of a police magistrate. He could dispose

of minor cases and might impose a fine not to exceed \$60, and in default of payment he might order the offender to undergo imprisonment not to exceed thirty days.

The Governor was responsible for the postal service and telegraph; public lands, woods, forests and mines; education, health, charities, and prisons; public works, and the collection of taxes; agriculture and industry.

The Governor was not permitted to have any hand in the disposition of public funds. His provincial and municipal accounts were required to be countersigned by his Secretary, who prefixed the word "*Intervine*" to his signature. The Governor was not allowed any of the percentages which the *Alcaldes-Mayores* formerly enjoyed, nor any emoluments beyond his stipulated salary.

Under these conditions the Provincial Governor was a great improvement over the *Alcalde-Mayor*, but it was mainly on account of negative qualities. Few Governors took an active interest in the betterment of their provinces, and, indeed, their scope of action was greatly restricted by circumstances. In the first place, the Governor found that peaceful administration, and perhaps the retention of his office, depended upon the goodwill of the friars and conformity with their wishes. Loss of office might follow a change of ministry, the death or downfall of a patron, or the desire of some influential personage to make a

place for a favorite. With such uncertainty as to the term of his official life it could hardly be expected that a Governor would devote himself very earnestly to schemes for the improvement of his province. He would seldom have the satisfaction of witnessing the fruition of his efforts, or even the assurance that his interrupted work would be carried on by his successor. As has been said, he had no control of the disposition of public revenues raised in his province, and which should, in large part at least, have been expended upon public works within the districts from which they were derived. All such moneys were, however, remitted to Manila, and by the central government diverted to other purposes, whilst the plans and estimates of provincial officials for roads and bridges were pigeon-holed. If a bridge broke down, so it remained, and the Government even made money out of the misfortune of the community by selling the right to establish a ferry. There was in each municipality a local tax termed "*Caja de Comunidad*," a sinking fund, contributed by the people against a time of stress and need, but this found its way to Manila and was misappropriated.

Foreman says that in 1887 the parish priest of Banan, Batangas Province, told him that although there must have been \$300,000 paid into this fund up to the year 1882 by his parish alone, yet financial aid was refused by the Government during the cholera epidemic of that year.

To quote further from Foreman: "The '*Tribunal*,' which served the double purpose of Town Hall and Dak Bungalow for wayfarers, was often a hut of bamboo and palm leaves, whilst others, which had been decent buildings generations gone by, lapsed into a wretched state of dilapidation. In some villages there was no *Tribunal* at all, and the official business had to be transacted in the municipal Governor's house. I first visited Calamba (on the Laguna de Bay shore) in 1880, and for fourteen years to my knowledge the headmen had to meet in a sugar-store in lieu of a *Tribunal*. In San Jose de Buenavista, the capital of Antique Province, the Town Hall was commenced in good style and left half finished during fifteen years. Either some one for pity's sake, or the headmen for their own convenience, went to the expense of thatching over half the unfinished structure. This half was therefore saved from utter ruin while all but the stone walls of the remainder rotted away. So it continued until 1887, when the Government authorized a portion of this building to be restored.

"As to the roads connecting the villages, quite twenty per cent. of them serve only for travelers on foot, on horseback, or on buffalo back at any time, and in the wet season certainly sixty per cent. of all the Philippine highways are in too bad a state for any kind of passenger conveyance to pass with safety. In the wet season many times I have made a sea journey in a *prahu* simply because the highroad near

the coast had become a mud track for want of macadamized stone and drainage, and only serviceable for transport by buffalo. In the dry season the sun mended the roads and the traffic over the baked clods reduced them more or less to dust so that vehicles could pass. Private property owners expended much time and money in the preservation of public roads, although a curious law existed prohibiting repairs to highways by non-official persons.

“Every male adult, or resident (with certain exceptions) had to give the State fifteen days’ labor per annum or redeem the labor by payment. Of course thousands of the most needy class preferred to give their fifteen days. This labor and the cash paid by those who redeemed the obligation were theoretically supposed to be employed in local improvements.

“The Budget for 1888 showed only the sum of \$120,000 to be used in road-making and mending in the whole Archipelago.

“It provided for a Chief Inspector of Public Works with a salary of \$6,500, aided by a staff of forty-eight technical and eighty-two non-technical subordinates.

“As a matter of fact the Provincial and District Governors were often urged by their Manila chiefs not to encourage the employment of labor for local improvements, but to press the laboring classes to pay the redemption tax to swell the central coffers, regardless of the corresponding misery and discomfort

and loss of trade in the interior. But labor at the disposal of the Governor was not alone sufficient. There was no fund from which to defray the cost of materials; or, if these could be found without payment, some one must pay for the transportation by buffaloes and carts, and find the implements for the laborers' use. How could laborers' hands alone repair a bridge which had rotted away? To cut a log of wood for the public service would have necessitated communications with the Inspection of Woods and Forests and other centres and many months' delay."

MUNICIPAL OFFICIALS.

Each township had its *principales*, or headmen, of whom there were twelve, elected by popular vote. From this body the petty local officials were chosen; namely, the *Gobernadorcillo*, or "Petty Governor," and his lieutenants, the *alguaciles*, or constables, and other minor officers. For the maintenance of order, and for the protection of the town, chiefly against lardrones, there was a body of local police called *cuadrilleros*, who were generally armed with *bolos* and lances, but in the more important centers carried firearms. The *Gobernadorcillos* were responsible to the Provincial Governor for the condition of affairs in their respective towns and for the due payment of taxes.

The immediate collection of taxes was effected by the headman of each *barangay*, or hamlet, which was the municipal unit. The *barangay* consisted of

from forty to fifty families, who were termed *sácopos*. For the payment of the proper taxes of his *sácopos* the headman was held responsible and a great deal of latitude was permitted in the methods of collection. The son of the Barangay Chief was recognized as his assistant, and both were exempt from taxation as remuneration for the performance of their duties. The office was hereditary, and on account of the unpleasant nature of its duties and the penalties attendant upon failure, was seldom desired, but it could not be avoided. No excuse was admitted for delinquency on the part of the headsman. His goods were liable to be sold to make up a shortage in his returns, and that recourse failing, he would be cast into prison.

The *Gobernadorcillo* disposed of petty disputes arising in his town, but when these assumed a legal aspect they were referred to the local Justice of the Peace, who was directly responsible to the Provincial Judge.

The salary of a *Gobernadorcillo* was \$2 per month, which, of course, fell very short of the actual expenses which he incurred in the performance of his duties, so that he was often forced to recoup himself by illegal exactions from the townspeople. The office carried with it the title of "Captain," and on that account was frequently sought by wealthy natives without regard to any profit that might be derived from it.

Under this system of administration five or six

THE YOUNG IDEA.

One of the municipal primary schools of Manila, with the scholars and native teachers who are instructing in English.

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Spaniards would furnish the entire complement of European civil servants of a province. The salaries attached to all offices were very small. The system was therefore economical in the extreme, but the taxpayers derived no benefit from that circumstance. Every official, the native no less than the Spaniard, looked upon his position as a field for plunder. The reform of 1886 did not effect any improvement in this respect. In fact, one of its immediate results was to increase the number of the parasites who fastened upon the country and pilfered the funds that should have been applied to public works. Frequently officials retired to Spain with accumulations far in excess of the aggregate of their salaries for the term of office, and this despite the fact that in most cases they paid a large premium for the appointment, or remitted a considerable proportion of its emoluments to the patron annually. So universal was the corruption pervading the administration that it came to be regarded as a matter of course. Foreman relates that he "met at table a provincial chief judge, the nephew of a General, and other persons, who openly discussed the value of the different Provincial Governments (before 1884) in Luzon Island on the basis of so much for salary and so much for fees and '*caidas.*' " *

* *Caidas*, literally "droppings." This was the expressive term employed by the Spanish officials to denote what we would call "rake-offs."

The office of Governor-General was not free from the taint. Sawyer, referring to what is practically a proven fact, says: "Weyler was said to have purchased the appointment from the wife of a great minister too honest to accept bribes himself, and the price was commonly reported to have been \$30,000 paid down and an undertaking to pay the lady an equal sum every year of his term of office." Foreman undoubtedly refers to the same individual when he writes: "A General who has quite recently made for himself a world-wide notoriety for alleged cruelty in another Spanish colony enriched himself by speculation to such an extent that he was at his wit's ends how to remit his ill-gotten gains clandestinely. Finally he resolved to send an army Captain over to Hongkong with \$35,000, with which to purchase a draft on Europe. The Captain left, but he never returned." If the story lacks anything of truth let us hope that it is only in an understatement of the sum involved.

Worse, however, than the corruption that characterized the civil departments of the administration was the shameful venality of the judicial branch from the supreme court to the provincial justice of the peace.

THE AUDENCIA.

The *Audencia* was established in 1584. It consisted of a president, that office being filled by the Governor-General; three auditors, or associate jus-

tices; a fiscal, or prosecuting attorney, and minor auxiliary officials. The *Audencia* had jurisdiction in all cases that might be appealed from the provincial authorities. It acted as a court of first instances only in "cases which, on account of their importance, the amount involved, and the dignity of the parties, might be tried in a superior court, and criminal cases arising in the place where the court might meet."

There was no appeal from the findings of the *Audencia*, except in civil cases of sufficient magnitude to justify an appeal to the King.

In the event of the inability of the governor to continue his duties, the *Audencia* was empowered to assume the government. The *Audencia* had authority to summon citizens of the islands either in peace or war. The *Audencia* also had a certain degree of jurisdiction in matters ecclesiastical. The duties and functions of this body were multiplex and various, being judicial, legislative, and administrative in character.

The *Audencia* soon incurred the displeasure of the priests, and their representations to the King resulted in the abolition of the body in 1589. It was, however, re-established in 1598, and in 1776 its personnel was enlarged by the addition of several members. Previous to 1840 the *Audencia* had discretionary power over the retention and removal of judges and justices, thus subjecting them to an altogether unde-

sirable influence. In that year a royal decree considerably curtailed that power.

From time to time there have been changes in the composition and functions of the *Audencia* which it is not necessary to consider.

INADEQUATE REFORMS.

We have already noticed the *alcaldes-mayores*, the governor-judges of provinces. A royal decree of 1844 instituted a reform in the qualification and status of these officials. From that time the *alcaldes* were divided into three classes. Three years' service in each category was required for promotion to the next, and members of the highest grade were eligible for appointment to the post of justice. It was provided that no person might be made *alcalde* unless he had practiced law for ten years, or had held an office for which a similar qualification was required.

By the royal decree of 1860 the composite functions which had been performed by the *alcaldes-mayores* were separated, and thereafter their authority was restricted to judicial matters. All the ordinary jurisdiction and functions of a judge of first instance devolved upon an *alcalde*. Some governors continued to exercise similar functions. Courts of first instance, and governors exercising the functions of such, took cognizance of all criminal and civil cases arising within their territories, except such as came under the jurisdiction of the ecclesiastical au-

thorities, or other special courts, and the *audencias*. They gave judgment in all civil cases in which the interest involved exceeded 1,000 *pesetas*.

THE JUDICIAL SYSTEM.

A royal decree of 1870 divided the provinces for the purpose of the administration of justice into judicial and municipal districts. Each district was given an *audencia*, each judicial district a court of first instance, and each municipal district a justice of the peace. The positions of judges were given to lawyers, or persons who had some professional, or academic title, or to those "whose position and circumstances warranted" the appointment.

As a rule, down to the end of the Spanish sovereignty, the judges of the courts were Spaniards, and the entire judicial system, including the codes of civil and criminal law, followed closely, if not literally, the forms observed in Spain. These were characterized by many proceedings calculated to prolong litigation indefinitely, to add greatly to the expense of lawsuits, to keep prisoners in confinement for long periods, and to prevent the impartial and speedy administration of justice.

Among other causes which were calculated to augment the troubles and expenses of all litigants was the ignorance of the *alcaldes-mayores*, and of many of the judges of first instance, of the law and the proper mode of procedure, as these officials were ap-

pointed as a rule for political reasons, or for almost any reason but proficiency, until after the separation of judicial and executive functions as already set forth. Again, the judges of first instance and *fiscales* had very small salaries, and municipal judges, and the clerks, and secretaries, of the courts had none at all, being dependent for remuneration upon official fees and such additional compensation as the litigants were willing and able to pay. The result was a great deal of corruption and extortion, and, taken in connection with the many legal obstructions always at hand and always resorted to by the dishonest and unscrupulous, made an appeal for redress to the courts so expensive as to be entirely beyond the reach of the average Filipino. Sawyer, whose opportunities for experience were exceptional, compares the *alcaldes'* courts to those of the Chinese *Yamens*, and goes on to say that "bad as the *alcaldes'* courts were, I think that the culminating point of corruption was the *Audencia* of Manila. *Escribano*, *abogado*, *júez*, *auditor*, *fiscál*, vied with each other in showing that to them honor and dignity were but empty words. . . . The records of these courts from the earliest times is one of long-continued infamy." The venality of the courts and their tortuous methods of procedure were only equaled by their tardiness of action. Sawyer and Foreman each cite instances of deferred justice which came under their personal observation and which it is safe to assert could not have occurred under any other civilized government in the world.

THE TARDINESS OF LEGAL PROCESSES.

In 1888, Juan de la Cruz, a Filipino, was arrested upon a charge of murder and lodged in Cavite jail. Direct evidence against him was not forthcoming, although circumstances pointed strongly to his guilt. Witnesses were examined and their depositions taken, but the prisoner was not brought before the court. So months and years passed away and still Juan continued in prison. "Judges came and judges went, but the trial came no nearer. Year after year a judge of the *Audencia* came in state to inspect the prisoners and year after year Juan was set down as awaiting his trial." Meanwhile some of the witnesses had left the islands and one, at least, was dead. In 1896 a Scotch engineer, who had not been in the Philippines at the time the crime was committed, was cited by a judge and asked if he could identify the prisoner, ten years after his arrest. Juan de la Cruz was never tried. He may have died like many another prisoner awaiting judgment, or he may have been released when the rebels occupied Cavite.

In 1884, a band of pirates raided the plantation of an Englishman in the province of Tayabas and committed several murders. Twenty-six of their number were captured and lodged in jail. To quote from Sawyer, "Year after year passed, still they remained in prison; judges came, stayed their term,

were promoted, and went, but still these men were never sentenced. In 1889 I visited Laguimanoc, . . . this was five years after the date of the murders; some of the prisoners had died in prison, the others were awaiting their sentence. . . . A year later I again visited Laguimanoc, but the trial of the prisoners was no further advanced. No less than nine of them died in prison; still no sentence was pronounced. . . . A few years ago . . . the surviving prisoners were pardoned by the Queen Regent, on the occasion of the young King's birthday."

Foreman says: " . . . Whoever might be the legal adviser retained, a criminal, or civil, suit in the Philippines was one of the worst calamities that could befall a man. Between notaries, procurators, solicitors, barristers, and the sluggish process of the courts, a litigant was fleeced of his money, often worried into a bad state of health, and kept in horrible suspense and doubt for years. When judgment was given it was as hard to get it executed as it was to win the case. Even then, when the question at issue was supposed to be settled, a defect in the sentence could always be concocted to reopen the whole affair. If a case had been tried and judgment given under the Civil Code a way was often found to convert it into a criminal case, and when apparently settled under the Criminal Code a flaw could be discovered, under the Laws of the Indies, or the *Siete Partidas*, or the Roman Law, or the *Novisima Recopilacion*, or

the *Antiguos fueros*, Decrees, Royal Orders, *Ordenanzas de buen Gobierno*, and so forth, by which the case could be reopened."

Foreman mentions the celebrated case of Jurado and Company *versus* the Hongkong and Shanghai Banking Corporation, as an illustration of the delays and uncertainties attendant upon litigation in the civil courts. Suit was entered in the year 1884.

"The Bank had agreed to make advances on goods to be imported by the firm in exchange for the firm's acceptance. . . . In due course the Bank had reason to doubt the genuineness of certain documents. Mr. Jurado was imprisoned, but shortly released on bail. He was dismissed from his official post of second Chief of Telegraphs, worth \$4,000 a year. Goods as they arrived for his firm, were seized and stored pending litigation, and deteriorated to only a fraction of their original worth. His firm was forced by these circumstances into liquidation and Jurado sued the Bank for damages. The case was open for several years, during which time the Bank coffers were once sealed by judicial warrant, a sum of cash was actually transported from the Bank premises, the Bank manager was nominally arrested, but really a prisoner on parole at his house. Several sentences of the court were given in favor of each party. Years after this they were all quashed on appeal to Madrid. Mr. Jurado went to Spain to fight his case. In 1891 I accidentally met him and his brother (a lawyer) in

the street in Madrid. The brother told me the claim against the Bank then amounted to \$935,000, and judgment for that sum would be given in a fortnight thence. Still years after that, when I was again in Manila, the case was yet pending and another onslaught was made on the Bank. The Court called on the manager to deliver up the funds of the Bank. On his refusal to do so a mechanic was sent there to open the safes. This man labored in vain for a week. . . . At one stage of the proceedings the Bank especially retained a reputed Spanish lawyer, who went to Madrid to push the case. Later on a British Q. C. was sent over to Manila from Hongkong to advise the Bank. The Prime Minister was appealed to; the good offices of our Ambassador in Madrid were solicited. For a long time the Bank was placed in a most awkward legal dilemma. The other side contended that the Bank could not be heard, or appear by itself, or by proxy, on the ground that under its own charter it had no right to be established in Manila at all, etc. Half a dozen times over the case was supposed to be finally settled, but reopened again. Happily it may now (1899) be regarded as closed forever."

It appears that after all the futile litigation this case was finally settled out of court.

AMERICAN ADMINISTRATION.

V.

AMERICAN ADMINISTRATION.

The Central Government and Legislative Authority—Provincial and Municipal Governments—Administration of Justice—Civil Service System—The Education of the Filipinos—Means of Communication—Foreign Commerce—Sources of Revenue—Navigation, Health, etc.—Manila—Bonded Indebtedness—The Census of the Philippine Islands—A Model Proclamation—American Census Methods Followed—Novel Experiences of Census Agents—Great Scope of the Census.

“The Philippines are ours, not to exploit, but to develop, to civilize, to educate, to train in the science of self-government. This is the path of duty which we must follow, or be recreant to a mighty trust committed to us.

“The question is not will it pay, but rather will we do what is right.”

In these noble sentiments President McKinley gave expression to the policy of the American Government toward the Philippines and their people. The high standard of conduct set by this platform has continued to characterize our rule in the Archipelago, and it is to be hoped that it will ever do so.

Even at the best period of Spanish sovereignty the political and economic condition of the islands afforded but a poor basis for the acquirement of

enlightened ideas upon government. There is every reason to believe that had the Filipinos secured their independence they would not, in the course of a long time, if ever, have brought their country to the state of reformation and advancement which has already been bestowed upon it under American administration. Furthermore, it is unquestionable that the Filipinos would have been content with a much less degree of liberty and beneficent action than that which they have experienced.

The most severe indictment of the American Government by foreign observers rests upon the assertion that they have granted to the Filipinos more extensive freedom than they are capable of exercising with good effect; that the policy of the Philippines for the Filipinos is founded upon an "impossible and quixotic theory"; and that the scheme of placing the "brown brother" upon a political equality with the white man is ill-advised and bound to result disastrously.

Whether these are errors time alone can tell, but at worst they will prove to have been the outcome of benevolent misjudgment. Better a thousand times that we should be convicted of over-indulgence in our dealings with the natives than that an accusation of oppression, or unfairness, should be established against us. One thing is beyond dispute, and that is, that if the Filipinos should display ineptness under the present conditions of American guidance and con-

trol their incapacity for self-government will be absolutely proved.

By the terms of the Treaty of Paris, which went into effect March 7, 1899, the Philippine Islands became a possession of the United States. The Taft Commission was appointed by President McKinley, in March, 1900, from which time the civil administration of the territory dates.

Let us see what has been done for the islands and their inhabitants in these five years of American rule:*

“Peace has been restored to the islands, and in a greater degree and over a larger area than at any period during the centuries the Archipelago was subject to the sovereignty of Spain.”

THE CENTRAL GOVERNMENT AND LEGISLATIVE AUTHORITY.

During the term of military administration not a little was accomplished in preparation for organizing and establishing civil government. The first efforts of the Taft Commission were directed toward perfecting and extending this work under instructions from the President contained in a document dated April 7, 1900. This state paper, which was prepared by Hon. Elihu Root, as Secretary of War, has been character-

* The following statements are a *resumé* of a Senate Document (No. 304, Fifty-eighth Congress), printed from a report of the Bureau of Insular Affairs, dated 1904.

ized by eminent authorities as "the most nearly perfect example of organic law, jurisprudence, guarding of rights, distribution of powers, administrative provisions, checks and balances, civilization ever beheld in a single document." It was a constitution, a code judicial, a system of laws ready made, statutes administrative, covering all the activities of a nation and meeting wants and solving problems innumerable. It was a masterly summing up of the governing experience of the self-governing people of the world, adapted to, and especially for, effective work in a given field. This "Magna Charta" of the Philippines has furnished the groundwork for a civic machinery which, after an amazingly brief constructive period, is moving so smoothly and effectively as to excite the wonder and admiration of all who are acquainted with it. The first step in the process was the separation of the various functions of government, previously centred in the military authority. To the latter was continued, for the time being, the executive powers; the legislative powers were conferred upon the Commission, and the judicial powers were transferred to courts created by the action of the Commission.

The scope of the legislative authority conferred upon the Commission was defined in the instructions as follows: "Exercise of this legislative authority will include the making of rules and orders, having the effect of law, for the raising of revenue by taxes,

customs, and duties, and imposts; the appropriation and expenditure of public funds of the islands; the establishment of an educational system throughout the islands; the establishment of a system to secure an efficient civil service; the organization and establishment of courts; the organization and establishment of municipal and departmental governments, and all other matters of a civil nature for which the military governor is now competent to provide by rules or orders of a legislative character."

From the outset the legislative sessions of the Commission have been public, and their enactments have been printed in the form of bills. Matters of general public interest have been discussed by committees before which natives have been called to express their views. Ordinary legislative opportunities for amendment have been afforded and bills and amendments have been publicly debated and voted upon, and when passed have had the force and effect of statutes.

During the year following its inception, the Commission enacted 263 statutes, every one of which received the approval of Congress.

In 1901 a further extension of civil government was effected by the transfer to the Commission of the executive authority over all the pacified provinces of the islands. The Hon. William H. Taft was appointed Governor, and separate executive departments were created and assigned to members of the Commission as follows: Department of the In-

terior, Dean C. Worcester ; Department of Commerce and Police, Luke E. Wright ; Department of Finance and Justice, Henry C. Ide ; Department of Public Instruction, Bernard Moses.

At the same time, by appointment of the President, three distinguished Filipinos were added to the membership of the Commission, namely, T. H. Pardo de Tavera, Benito Legarda and Jose Luzuriaga.

The administrative duties of the government are distributed in the following apportionment :

The Department of the Interior controls bureaus of health, forestry, mining, agriculture, fisheries, weather, public lands, ethnology, patents and copyrights, quarantine service, government laboratories, and the marine-hospital corps.

The Department of Commerce and Police embraces bureaus of inland and inter-island transportation, post-offices, telegraphs, coast and geodetic survey, engineering and construction of public works, other than public buildings, insular constabulary, prisons, light-houses, and all corporations, except banking.

The Department of Finance and Justice directs the bureaus of the insular treasury, the insular auditor, customs and immigration, internal revenue, cold-storage and ice-plant, banks, banking, coinage and currency, and the bureau of justice.

The Department of Public Instruction includes the bureaus of public instruction, public charities, public libraries and museums, statistics, public rec-

ords, government printing, architecture, and construction of public buildings.

The powers of the judicial branch of the government are exercised by the Supreme Court, composed of seven members, appointed by the President, three of whom are Filipinos. All other judicial positions are filled by appointees of the Commission. At present fifteen Americans and six natives are judges of the courts of first instance. Practically all the judges of the minor courts are natives.

Congress has vested in the government of the Philippine Islands authority to exercise certain powers of sovereignty never before conferred upon any portion of the territory of the United States for the exclusive use and benefit of that territory. The Philippine government is authorized to impose duties upon goods coming to the islands from ports of the United States; to issue its own distinctive currency and assume direction and control of its postal service. Furthermore, Congress has conveyed to the government of the Philippine Islands all the public property, and the rights pertaining thereto, which passed from the crown of Spain to the United States of America.

Following an election to be held April, 1906, the legislative power will become vested in a legislature consisting of two houses, to wit: The Philippine Commission and the Philippine Assembly, the members of the latter to be elected by the inhabitants of the islands.

Pursuing the policy laid down in the instructions of the President, the Commission passed a general act for the organization of provincial governments. The municipality was made the political unit, and the entire territory of the islands is divided into municipalities very similar to the townships in America. Up to the present the system has been applied to the thirty-four Christian provinces, except that the city of Manila is incorporated under a special charter. The provincial and municipal officials are elected by popular vote, exercised under liberal suffrage regulations.

PROVINCIAL AND MUNICIPAL GOVERNMENTS.

The administration of each municipality is composed of a president, vice-president and a municipal council, chosen by the qualified electors of the municipality, to serve for two years. The franchise is extended to those who (*a*) prior to August 13, 1898, held certain offices under the Spanish Crown; those who (*b*) own real property to the value of 500 *pesos* (a *peso* is now equivalent to fifty cents American money), or who pay annual taxes of thirty or more *pesos*; and those who (*c*) speak, read, and write English or Spanish.

The municipal government of the city of Manila closely resembles that of the city of Washington, but whilst the Federal Government pays one-half of the expenses in the latter case, in the former the con-

tribution of the General Government is no more than three-tenths. The Municipal Board consists of three members (one of whom must be a Filipino) appointed by the Governor, with the approval of the Commission. There is also an Advisory Board, consisting of one member (appointed by the Governor, with the consent of the Commission) for each of the eleven districts of the city. The Advisory Board is charged with the duty of investigating the special needs of the municipality and its citizens, and of making such suggestions to the Municipal Board as it may deem necessary. All important matters of municipal legislation must be submitted to the former body before being acted upon.

Under the general provincial law providing for the aggregation of several municipalities in larger administrative divisions, the thirty-four Christian provinces were organized. The provincial government consists of five officers for each province (except that in some cases the offices of treasurer and supervisor are combined), namely, governor, treasurer, supervisor, secretary and *fiscal*, or prosecuting-attorney; of these, the first three form the governing board. The functions of the provincial government include the collection of taxes, the construction of roads, bridges, and public buildings, and the supervision of municipal officers. It is the duty of the provincial governor to make visits twice a year to each of the towns in his province. He is responsible for the proper conduct of the municipal administrations, and he may remove any municipal

officer for cause. The provincial treasurer collects all the taxes, remits those due to the town to the municipal treasurer, and audits the accounts of that official. The supervisor, who must be a civil engineer, is charged with the execution of all public works and the supervision of them. The *fiscal* acts as counsel for the governing board and for each of the municipalities in the province. The provincial governor is elected biennially by a convention composed of the counsellors of the municipalities in the province. The positions of treasurer and supervisor (usually filled by Americans) are subject to the civil service law and the positions of secretary and *fiscal* are filled by appointment of the Philippine Commission. At this time all the provincial governors of the Christian provinces are duly elected Filipinos. The remaining provincial offices are filled by 86 Americans and 238 natives.

It will be noticed that the provincial and municipal governments conform very much in structure to the similar administrative branches under the Spaniards. It was wisdom on the part of the Commission to retain as nearly as possible the form of local government to which the natives were accustomed, whilst giving them a greater share in the administration and a promise of honest and capable officials.

The system is working to the satisfaction of the people and of the Commission. Amongst upwards of twelve thousand Filipino municipal officials there

have been remarkably few instances of misconduct and no case of a violation of the oath of office has been established against a president.

The administration of the Moro province is especially designed to preserve as far as possible, consistently with the general policy applied to the Philippine Islands, the "customs of the Moros, the authority of the *Datos*, and a system of justice in which the Moros shall take part," and to these ends a very large measure of discretion is allowed to the legislative council. That body consists of a governor, who is an officer of the U. S. Army, a secretary, attorney, engineer, superintendent of schools, and treasurer. The five remaining provinces, namely, Benguet, Lepanto-Bontoc, Mindoro, Nueva Vizcaya, and Paragua, are inhabited for the most part by well-disposed though deeply ignorant tribes, to whom it would be impracticable, for the present, to extend any measure of self-government. Consequently all the provincial and municipal positions in these provinces are filled by appointment. The system under which they are governed, approximates, however, as closely as possible to that which obtains in the Christian provinces, and will be assimilated to it as rapidly as conditions justify.

ADMINISTRATION OF JUSTICE.

A complete judicial system has been established by legislative enactment throughout the Archipelago.

New codes of criminal law and procedure will shortly be enacted, with the effect of "simplifying procedure and eliminating those provisions of the existing codes which pertain to the sovereignty of Spain, the union of church and state, the rigid restrictions on the exercise of discretion by the judges, the giving to private individuals the right to control and compromise criminal prosecution, or to use such prosecutions for the purpose of blackmail and extortion, and the authority of the executive branch to control the courts."

The judicial powers of the government are distributed as follows:

The territory of the Archipelago is divided into fifteen judicial districts, in each of which there is a court of first instance. A judge is assigned to each of these districts and four to the district of Manila. There are three additional judges to fill vacancies.

The appellate jurisdiction is vested in the Supreme Court, which consists of seven members, three of whom are Filipinos. Provision is made for appeal from the supreme court of the islands to that of the United States. There is a justice of the peace and an auxiliary justice of the peace in each municipality. There are a court of customs appeals, a court of land registration, and registrars of deeds for each of the provinces.

The attorney-general is an American, the solicitor-general a Filipino, and their assistants about equally divided between the two nationalities.

OFFICE OF A JUSTICE.

A hearing before a justice of the peace in a country district, the prisoner guarded by native constabulary.

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The civil service bill provides for the selection and promotion of civilians to government positions solely on the basis of merit. The chief preference is given to natives of the islands, and next, to honorably discharged soldiers, sailors, and marines of the United States. Examinations are made in the Philippines and also throughout the United States by the United States Civil Service Commission. From the first it has been found practicable to employ Filipinos extensively in the provincial and municipal services where a knowledge of English was not essential, and with the progress made by them in acquiring that knowledge large numbers have been appointed to positions in the central government at Manila. With the exception of a few requiring special technical and professional knowledge, and the elective offices of the provinces, all government positions come within the scope of the civil-service act.

It was the purpose of the Commission in passing the civil-service bill to provide a system which would secure the selection and promotion of civilian officials solely on the ground of merit, and would permit any one, by a successful competitive examination, to enter the service and by the efficient discharge of his duties reach the head of any important department of the government.

The Annals of the American Academy of Political and Social Science, May, 1902, contained the following comment:

“It is hard to see how our government of the Philippines could be started upon its path in any better way than by the excellent provisions established by the Philippine Commission. The reflex action upon our Government at home of the establishment of a complete merit system in the Philippines is sure to beget good results when contrasted with the inefficiency and corruption that flow from the remnants of the spoil system here at home. It will be remembered that England first tried competitive methods in her Indian possessions before she established the civil service system at home, and it was the successful working of this commission in India which led to its adoption in England. It may not be improper to repeat here the opinion expressed on a former occasion that inasmuch as the beginnings of this reform came from Calcutta to London, it is not impossible nor unreasonable to expect that its perfect consummation may come from Manila to Washington.”

In support of the foregoing prediction it may be affirmed that there is no department of the United States Government more free from the corrupt practices common to most administrations than those branches of it that pertain to the Philippine Islands. Whilst this is true to-day it might have been stated ten years ago with equal truth that in no part of the civilized world were such practices more prevalent than in the Philippine Islands.

The following table shows the distribution of

government positions. It does not, however, include the Philippine Scouts, which body is on the establishment of the United States, nor the numerous unskilled employees of the various departments:

	Americans.	Filipincs.
Members of the Philippine Commission ...	5	3
Justices of the Supreme Court	4	3
Judges of the Courts of First Instance ...	16	7
Judges of the Court of Customs Appeals..	1	1
Judges of the Court of Land Registration.	1	1
Justices of the Peace and Auxiliary Jus- tices	..	1,708
Civil Service of the General Government..	1,777	2,697
Governors of Provinces	8	32
Other Provincial Officials	86	238
Municipal Presidents (Mayors)	..	982
Municipal Counselors	..	8,159
Municipal Secretaries-Treasurers	..	2,906
Total	1,898	16,737
Municipal School Teachers	..	3,500
Teachers of English	1,000	..
Total	1,000	3,500
Municipal Police	..	10,000
Philippines Constabulary	345	7,000
Total	345	17,000

The duty and expense of providing educational facilities for the Filipinos is assumed by the general government (augmented in some instances by municipalities), and the work is carried on by a department of public instruction. About 3,500 natives and 1,000 Americans are engaged as teachers, the latter in imparting a knowledge of English to the former and in instructing classes of children. At present the department maintains about 2,000 primary schools and 38 secondary schools. In addition, the government conducts a number of technological institutions, including a trade school and an agricultural school. There is also a well-equipped nautical school, primarily for the purpose of educating officers for the inter-island merchant marine. Night schools in Manila and other centers afford facilities to adults and the average attendance is recorded as 10,000 daily.

FILIPINOS IN THE UNITED STATES.

An enactment of the Commission made continuous provision for the education of a certain number of Filipinos in the United States. In accordance with its terms not fewer than 100 Filipinos are to be sent to America each year, to remain for a period of four years, during which time they will receive advanced instruction in various schools and colleges and will be afforded the widest facilities for acquiring any knowledge which may be useful to themselves and their people upon their return. This privilege is

extended upon the condition that those who enjoy it will upon the completion of the educational term of four years submit to the competitive examination for the civil service, and upon appointment serve under the government for at least the length of time spent at its expense in the United States, but otherwise the benefaction is free of conditions or obligations.

It is expected "that the return of these people to the islands and the dissemination of information by them will have a most beneficial and far-reaching effect."

It is impossible to subscribe to this sanguine conclusion without qualification. The experience of all colonial governments has been that the most troublesome element of a native population is the comparatively small number who have received education, and particularly those who have been educated abroad. However, that is only one of the risks necessarily involved in the liberal policy the American Government has determined to pursue in the Philippines.

In the last fiscal year the Bureau of Education expended 2,438,185 *pesos* in addition to the sums contributed by different municipalities and provinces for educational purposes. The amount of the Spanish expenditures on the same account in 1894 was 404,731 *pesos*.

A complete system of currency has been established, which, by maintaining a fixed medium of exchange, avoids the fluctuations which were such a

grave detriment to trade in former days. The silver coinage is based upon the decimal system and ranges in value from the ten-*centavo* piece to the one-*peso* piece. There is also a nickel coin of five-*centavos* and bronze coins of one and one-half *centavo*. These coins have a fixed convertible value to the United States currency in the ratio of 2 to 1. A gold reserve is maintained for the purpose of preserving this parity. The islands have a distinctive paper currency consisting of silver certificates in the denomination of two, five and ten *pesos*, bearing the vignettes respectively of Jose Rizal, McKinley and Washington. During the Spanish *régime* the currency of the Philippines was subject to the fluctuations of the silver bullion market, and the trade of the islands was effected by the varying influences of an ever-changing currency as well as an ever-changing rate of exchange.

MEANS OF COMMUNICATION.

The Postal System has been extended to every part of the Archipelago, and mail is carried between the several offices with promptness and regularity. The issuance of money orders has proved a great boon to the outlying districts which entirely lack banking facilities. There are more than 200 post-offices in the islands. The rate of postage is the same as in the United States.

The extensive telegraph and telephone systems

operated during the military occupation have been enlarged and improved, so that at present 8,000 miles of land and sea telegraph lines exist, connecting almost every municipality with the seat of the central government. The new Pacific Cable connecting the United States with the islands will materially reduce the cost of messages and should prove of the utmost importance to commercial interests.

Much labor and millions of money have been expended upon the construction and improvement of highways under the direction of army engineers. Although the work has been carried on under many adverse conditions, highly satisfactory progress has been made. The extensive system of railroads whose construction is in immediate prospect must prove a factor of the greatest importance in the development of economic and social conditions.

The Archipelago has not as yet been completely surveyed, but the official estimate of 74,000,000 acres doubtless expresses very closely its extent. About 5,000,000 acres of this area are owned by private individuals, the balance being public lands. The purchase of the friar lands by which 410,000 acres passed to the government at a cost of \$7,239,000, was an important measure from the politic as well as the economic point of view. The native occupants, who entertained the most bitter feelings toward their landlords, held their leases under conditions which precluded the possibility of development and pros-

perity. In the hands of the Commission these lands promise to be a source of profit to both the tenant and the State.

Referring to this important matter, Governor Taft, in his report for the year 1903, says:

"It is thought that the results of these negotiations and the purchase of the lands form a most important step in the rehabilitation of the people of the islands and that the readjustment of their relations to the Roman Catholic Church, which cannot but be of material benefit in a political way to the insular and provincial governments. . . . We cannot prophesy that the adjustment will rid us entirely of the agrarian questions. There will be, doubtless, litigation and local centres of disturbance growing out of government landlordism; but the elimination of the friars from the question cannot but tend to greatly facilitate satisfactory adjustment. . . . The number of friars in the islands is rapidly diminishing from year to year, and with the adjustment of the land question and the division of the proceeds between the Orders and the Church and the use of the part belonging to the Roman Church for improvement of the Philippine church, we may reasonably hope that in a decade the agrarian and political question of the friars in the Philippines will have been completely removed from among the obstacles to good government with which the Americans, in coming to the islands and assuming control thereof, were confronted."

Extensive investigation of the resources of the islands has been conducted by the appropriate bureaus, and a mass of extremely valuable information has been published in the form of government reports. The forests prove to contain an enormous wealth of valuable timber and vegetable growth. The mineral and coal fields have been surveyed and laws favorable to their development have been enacted. In the department of agriculture, which is the chief resource of the inhabitants, the most striking utilitarian results have been produced by a competent corps of scientific assistants. Experimental stations and model farms have been established, and steps taken, by means of quarantine establishments and serum laboratories, to stamp out rinderpest and other cattle diseases. A stock farm is in operation for the purpose of carrying on experiments in breeding with a view to producing farm animals especially adapted to the conditions of the Philippines. In order to alleviate the heavy losses from disease during the earlier years of American occupation, the government imported a great number of draft animals, chiefly *carabao*, which were sold to the farmers at less than cost. A movement to rehabilitate the coffee industry, which some ten years ago collapsed under insect blight, bids fair to restore to the islands what was formerly a very important and profitable commercial enterprise. The agricultural college on the island of Negros is doing a notable work in the education of native farmers to scientific agriculture

The tariff regulations were adopted only after the submission of the draft of the proposed legislation to the importers and exporters of Manila and of the United States.

FOREIGN COMMERCE.

With a view to the rapid development of the islands import duties (except upon luxuries) have been placed at low figures, lower, in fact, than those which prevailed during the Spanish *regimé*, or those in force in the United States. An act of Congress allows for a reduction of 25 per cent. of the Dingley tariff on imports into the United States from the Philippines, and further provides that all duties collected in the United States on articles coming from the Philippines and also tonnage dues shall be remitted to the Philippine treasury for the benefit of the islands; also that the Philippine government shall refund the export duties upon hemp and other products of the islands in the event they were exported to the United States.

During the first five years of American administration the commerce of the Philippines increased 150 per cent., from \$25,000,000 in 1899 to \$66,000,000 in 1903. Despite agricultural depression the exports have advanced during that period from \$12,000,000 to \$33,000,000, leaving a balance of trade in favor of the islands. The passage of the act of Congress relating to customs, etc., enabled the United States immediately to displace the United Kingdom as the chief customer of the Philippine Islands.

SOURCES OF REVENUE.

The chief sources of revenue are customs receipts, from which approximately 80 per cent. of the whole is derived; internal revenue, including an industrial tax on all trades, professions, and arts; a land tax; registration taxes; etc. It may be stated that the postal service is nearly self-supporting.

The total revenue for the fiscal year ending June 30, 1903, amounted to \$15,326,125, and the expenditures to \$14,262,503. During the first five years of American occupation the revenue aggregated \$49,915,944, and the expenditures \$37,516,076.

NAVIGATION, HEALTH, ETC.

Harbor improvements have been carried out at Manila, Cebu, Iloilo, and other points, and extensive surveys of the more important harbors and gulfs have been completed under officers of the United States Coast and Geodetic Survey. An appropriation of \$6,000,000 for the harbor of Manila is designed to increase greatly the accommodation of that port, and to enable vessels, from the shelter of a breakwater, to discharge cargoes at all seasons upon the docks, without the medium of lighterage, whereas formerly, during the monsoons, ships frequently lay for several days in the bay, incurring heavy demurrage, whilst awaiting a favorable opportunity to unload.

An efficient coast-guard service has been estab-

lished, with seventeen vessels, fifteen of which are new ones purchased by the Philippine government. In the matter of health and sanitation, the government encountered one of the most serious and difficult of the many problems presented by the condition of the islands when transferred to the United States. In spite, however, of indifference and in many cases active opposition, upon the part of the natives, measures for the improvement of the health of Manila and the different provinces have been applied with vigor and the most remarkable results. Owing to compulsory vaccination, smallpox, formerly the great scourge of the islands, has ceased to be an important factor in the death rate. The ability of the board of health to cope with serious emergencies was severely tested by the cholera epidemic, which broke out over a wide area in 1902. Many of the towns affected were without medical aid, or any knowledge of means of checking the plague. Nevertheless, by prompt and energetic action the attack was eradicated in less than a year. The magnitude of the operations of the board of health on this occasion may be judged from the fact that its expenditures were considerably in excess of 1,000,000 *pesos*. Hospitals, dispensaries, detention wards, and their appropriate auxiliaries, have been established and an efficient quarantine service is maintained. At Benguet, in the highlands, a sanatorium has been established by the government for the recuperation of civilians and soldiers. As a so-

jour at Benguet produces results equally good with those following transfer to the United States, great saving in time and money, it is believed, will be effected by the institution.

MANILA.

Manila is the seat of central government and the commercial centre of the islands. Its system of municipal administration is based upon that of the city of Washington. The streets, which formerly were frequently submerged during heavy rains, have been elevated, graded, widened and paved. The bridges across the Pasig have been improved and an addition made to them by a fine double bridge of the latest pattern. The water supply has been increased and improved. Under Spanish rule Manila was entirely destitute of sewage accommodation. The deficiency has been remedied by the installation of an adequate system, in course of extension. Modern market buildings have displaced the aggregations of native huts, which represented the trading marts of Spanish days. An electric road of forty-five miles has solved the problem of transportation in the widely-straggling city. The corporation which operates this railroad will supply electric light and power to the municipality. The antiquated and wholly inadequate fire department maintained by the Spaniards has been transformed into a first-class fire department, with an ample supply of up-to-date apparatus. The city is

excellently policed by natives under the supervision of Americans. The public parks have been improved and enlarged, and a plot of land set aside for a botanical garden.

BONDED INDEBTEDNESS.

The finances of the islands have been managed with the utmost skill and economy. The funded debt has, paradoxical as the statement may appear, been so far a source of profit. Under the Spanish Crown the debt of the islands was \$40,000,000. This was disposed of by the purchase and the payment by the United States of \$20,000,000. The present obligations of the Philippine islands, the rates of interest paid upon them and the premiums received are shown in the following table:

Character of Loan.	Interest.	Premium.
First issue one-year certificates, \$3,000,000.	\$120,000	\$75,390
Second issue one-year certificates, \$3,000,- 000	120,000	67,200
Bonds for the purchase of friar lands, \$7,000,000	280,000	530,370

Distributing the premium of the friar lands bonds over the redemption period of ten years, the net annual interest charge is reduced to 3.1 per cent.

The net interest charge upon the government for its funded debt is \$224,410, a rate of about 2.25 per cent. of the customs receipts, the principal revenue of the islands. No other country in the world can

boast that the interest on its public debt is offset by such a small percentage of its revenue. In France, 30 per cent. of the gross revenue is required to meet the interest on the national debt; in Great Britain, 19 per cent.; in the United States, 5 per cent, without taking into account State indebtedness. In the Philippines the funded debt amounts to \$1.62 per capita, and the annual interest charge to four cents per capita; in the United States the first item is in excess of \$12, the second of 30 cents; in Great Britain the figures are \$90 and \$3; in France, \$150 and \$6.

“There are few, if any, civilized States, moreover, which have so much to show as the Philippines for the debt which they have incurred. A part represents a substantial asset in gold in the custody of banks and trust companies in New York. The other part represents the acquisition of the best lands in the Philippine Islands, which the Government has acquired from the friars, in order to give them back to their natural cultivators, the people of the islands. Both of these debts will be subject to reduction in the course of events without levying taxes or providing a sinking fund. In the case of the \$6,000,000, which has been appropriated temporarily to meet the expenses of inaugurating the new coinage system, half of the amount will be no longer necessary when the system is completed. The money was made available simply for the purpose of covering capital tied up in bullion in transit from the mines to the completed coin.”

The taking of the Philippine Census of 1903 was an act of the greatest importance and in more than one respect an extraordinary achievement. The work was undertaken in accordance with an act of Congress approved July 1, 1902, which provided "that whenever the existing insurrection shall have ceased and a condition of general and complete peace shall have been established therein . . . the President, upon being satisfied thereof, shall order a census of the Philippine Islands to be taken by said Philippine Commission; such census in its enquiries relating to the population shall take and make, so far as practicable, full report of all the inhabitants, of name, age, sex, race, or tribe, whether native or foreign born, literacy in Spanish, native dialect or language, or in English; school attendance, ownership of homes, industrial and social statistics, and such other information, separately for each island, each province and municipality, or other civil division, as the President and such commission may deem necessary."

POLITICAL OBJECT OF CENSUS.

The chief political object of the census was set forth in the following words:

"That two years after the completion and publication of the census, in case such condition of general and complete peace with recognition of the authority of the United States shall have continued in the terri-

MANILA HEMP.

This picture depicts the preparation of Manila hemp, or abaca, for shipment at Cebu. In the background is one of the many vessels that ply between the capital and various insular ports.

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tory of said islands not inhabited by Moros, or other non-Christian tribes, . . . the President upon being satisfied thereof shall direct said Commission to call, and the Commission shall call, a general election for the choice of delegates to a popular assembly of the people of said territory in the Philippine Islands, which shall be known as the Philippine Assembly. After said assembly shall have convened and organized, all the legislative power heretofore conferred on the Philippine Commission in all that part of said islands not inhabited by Moros, or other non-Christian tribes, shall be vested in a legislature consisting of two houses—the Philippine Commission and the Philippine Assembly. Said assembly shall consist of not less than 50, nor more than 100, members, to be apportioned by said Commission among the provinces as nearly as practicable according to population.”

The censuses effected under the Spanish Government were little more than mere enumerations, and even as such were very far from being complete or reliable. Their main object was to form a basis for taxation and conscription. They were, therefore, highly unpopular with the masses, who obstructed and misinformed the enumerators. It was to be expected that the agents of the American Government would experience similar difficulties, if not greater, on account of the recently disturbed state of the country. However, the Commission boldly essayed the

task, voluntarily increasing its magnitude, and deliberately choosing the most arduous, though also the most effective, method for its accomplishment. The outcome was a triumph for the Commission and a complete refutation of the predictions of pessimists at home and in the islands.

A MODEL PROCLAMATION.

It was also a thorough justification of the confidence Governor Taft has always been ready to place in the Filipinos when appealed to in the right way. His proclamation upon this occasion, simple, conciliatory and logical, was unquestionably a potent factor in the result. As a pattern for the style of public document which is most effective with a people like the Filipinos it is well worth quoting:

“In accordance with the policy of President McKinley, announced in his instructions of April 7, 1900, the Philippine Commission has extended to the people of the Philippine Islands complete autonomy in the matter of municipal government, and partial autonomy in the matter of provincial government. By actual experience the qualified electors of the Philippine Islands are learning the science of self-government. The policy of the late President McKinley has been sincerely adopted and followed by President Roosevelt; and the aim of the Commission in accordance with his instructions, gradually to extend self-government to the people of the islands, was

approved and adopted by the Congress of the United States at its last session, in the so-called Philippine Act, by which provision was made for the election of a popular Philippine assembly within two years after the taking of a comprehensive census of the Philippine Islands. The taking of the census is indispensable to the calling of a general election for this popular assembly. No other object besides the collection of the necessary data for determining the social and industrial conditions of the people, as the basis of intelligent legislative action, is involved in the taking of this census. By the terms of the census law, passed by the Philippine Commission, it will be seen that the census is to be largely in the hands and under the control of the Filipinos. The taking of the census will therefore form a test of the capacity of the Filipinos to discharge a most important function of government. The information secured by the census will form the basis upon which capital will be invested in the islands and the material prosperity of the people brought about. The census, therefore, is to be taken solely for the benefit of the Filipino people, and if they desire to have a larger voice in their own government within the near future, if they desire to demonstrate to the world a growing capacity for self-government, and if they would aid the investment of capital and the improvement of their material condition they should lend their unanimous support to the successful taking of the census."

The same proclamation appointed March 2, 1903, as "census day," and upon that date the work began simultaneously in every part of the Archipelago.

AMERICAN CENSUS METHODS FOLLOWED.

It had been determined, in dealing with the Christian, or civilized peoples, to adopt the American method of census taking, which is the most comprehensive extant, and much more efficient than any method which had ever been applied to an Oriental people. Its operation required, in addition to the Bureau force, a specially appointed corps of supervisors, special agents, special enumerators, and enumerators with sufficient intelligence to collect the desired statistics. It also required the division of the country into supervisors' districts, having clearly-defined geographical limits, and these into equally well-defined enumerators' districts. Here the first and a very serious obstacle was encountered in the lack of provincial or municipal maps. This difficulty was overcome by requiring the presidents of municipalities to return diagrams of their respective townships showing the relative location and the approximate distance of each *barrio* from the main *barrio* or seat of municipal government and, if possible, the area of the municipality. Under the authority to collect "such other information" as might be deemed necessary the Commission decided to add to the data specified by Congress the statistics of schools, agri-

culture, manufactures, railroads, fishing, mining, telegraph, express transportation, insurance, and banking, so that the extent of inquiry of this census of the Philippines was almost as wide as that of the Twelfth Census of the United States.

The governors of provinces and the presidents and councilmen of municipalities were employed as far as possible. Amongst the Moros and other wild tribes of Mindanao it was thought advisable to employ officers of the army. The total number of persons engaged in taking the Census was 7,627, of whom 118 were Americans, 7,642 native men and 40 native women, 1 Japanese and 6 Chinese. The work everywhere progressed smoothly. Three enumerators were attacked by ladrones, but, with this exception, there was no opposition to the census, and the fact may be accepted as significant of the attitude of the masses toward the American Government as represented by the Commission.

NOVEL EXPERIENCE OF CENSUS AGENTS.

The experience of many of the census agents was interesting and instructive, especially in dealing with the wild tribes. The Supervisor of Nueva Vizcaya said: "The Igorots are very slow to move, and do not count beyond ten; after that it is so many tens up to one hundred, and beyond one hundred is an incomprehensible figure to them which they never enter into. The system adopted by me was to send enumer-

ators some days ahead to advise the Igorots of what we wanted, and get them to count their houses, people, and domestic animals, and measure by a sample stick given them the land owned and cultivated by each family. They counted the animals and people by making notches on rattan sticks and bringing one bundle to represent the men, one bundle for the women, one for the chickens, pigs and so on, together with the name of the settlement."

Major Kennon in the Iligan district found the Moros anything but communicative. He stated that "a considerable amount of diplomacy was necessary in order to overcome their suspicions. One of the sultans of the district refused absolutely to give any information whatever. I reasoned with him in every way, but could get nothing from him—not even his objections. At last I told him that we were not obtaining the data for the purpose of putting a tax on his people. At this he opened up somewhat; and when I spoke of the customs of the people and of the intention of the Americans to leave all minor questions of that character to the people, it seemed that I had found the basis of his objections. He brightened up at once and said he had feared that we wanted to make them dress like white folks and Filipinos; that we wanted to make them wear shoes and hats and to cut off their hair. Reassured on this point, he readily gave all the information desired."

Another report from a Moro district says: "The

Moro has some excellent qualities, but appreciation of the value of time is certainly not one of them. The asking of the most necessary questions, or the obtaining answers to them, would frequently take up a full hour of our time at one Moro's house. . . . Again, some of the necessary questions the Moros wouldn't answer at all; for instance, no Moro will tell his own name under any circumstances." This difficulty was possibly overcome by asking each man the name of his neighbor.

GREAT SCOPE OF THE CENSUS.

The results of the census are contained in four large volumes aggregating about 2,500 pages.* It brought to light a great deal of new information of a valuable nature and corrected many errors and misconceptions. In addition to the statistical tables and analytical text, the publication includes a number of pertinent articles, mostly contributed by natives, the whole making a complete and accurate presentation of the islands and their inhabitants. Some of the facts strikingly brought out by the census are as follows: The Spanish estimate of the number of Moros was far in excess of the actual figure, and the number of Chinese in the islands has been greatly exaggerated. The census gives a total of 41,000 for the latter. Practically all the people are engaged in agriculture of some form, but the area under cultivation is

* Census of the Philippine Islands. Washington, 1905.

small compared to the whole. Applying the standard of ability to speak, read, and write Spanish, but 1.6 per cent. of the civilized population may be considered educated. The statistics support the statement that the climate of the Philippine Islands is salubrious and healthful, and the reports of the Surgeon-General of the Army point to the same conclusion. Conspicuous facts are the entire absence of hospitals, except in a few large cities; the existence of but twelve public libraries, with 4,019 volumes, the great preponderance of churches, the small number of newspapers, and the comparatively small number of paupers and criminals. The data concerning insurance, banks, telegraph lines, and express, show the need rather than the existence of these forms of industry. The same may be said of roads and railways. On the other hand, great improvements, expected and in prospect, are shown in the facilities for water transportation. The schedule relating to mechanical industries exhibits the limited extent of manufactures and the excellent opportunities for investment in that direction. The report makes it very apparent that the great need of the Philippines now is moral, material, and industrial improvement commensurate with their political condition.

COMMERCE.

VI.

COMMERCE.

Traffic with Mexico—Early Commercial Enterprises—The Colony Opened to the Trade of the World—A Review of Philippine Commerce—The Import Trade—The Export Trade—Manila Hemp—The Sugar Industry—Tobacco—Copra—Coffee—The Transportation Problem.

It will be remembered that the conquest and colonization of the Philippine Islands were effected from Mexico, and the islands continued to be a sort of dependency of the older possession. Regular communication was established between the two countries by means of State galleons which made a voyage to and fro once a year. The service was established in 1611 and maintained until 1815. The State *Nao* carried from one to four million dollars worth of specie and merchandise and transported officials and despatches. For a long period it was the only stated means of communication between the colony and the mother country. The vessels were squat, tub-like four-deckers, with great elevation fore and aft. They carried cannon and men-at-arms.

Until about the middle of the nineteenth century the Philippines had no distinctive currency, and in the early days there was no coin of any kind in the islands. Taxes were paid in kind and stored in

Manila to await the periodical calls of the Chinese traders, with whom they were bartered. The Chinese wares and manufactures thus acquired were shipped to Mexico for sale on account of the Royal Treasury. In return a certain sum of money, termed the *Real Situado*, or Royal Allowance, was yearly furnished to the Insular Government for the maintenance of the administration. Theoretically these transactions balanced, but as a matter of fact there was always a deficit in the revenues, which could not have been made up without the subsidy.

TRAFFIC WITH MEXICO.

The available space in the vessel, after the royal shipment had been accommodated, was placed at the disposal of a close corporation of merchants called the *Consulado*. The value of their annual shipments was at first limited to \$250,000, the return for which could not legally exceed \$500,000 in cash, being one hundred per cent. profit, the amount realized for many years on these ventures. The value of the merchandise that might be shipped in this manner was increased from time to time, ultimately reaching \$750,000. It always remained nominally under regulation, but the restrictions upon it were constantly evaded. The commerce of the islands was for two centuries limited to this traffic with Mexico. The merchants were permitted to engage in trade to the extent of buying such productions of China,

India, and Persia, as might be brought to the Philippines, and transshipping them to New Spain. These, and the produce of the Archipelago, were the only kinds of merchandise in which they might deal, and they were only allowed to acquire foreign goods from traders who brought them to the islands.

Thus the *Naos de Acapulco* were not only the sole channel for the trade of the Archipelago, but also the sole source of money for the use of the Government and the people. It followed that any derangement of the regular sailings caused serious injury to the Colony. Shipwreck and tempest not infrequently disposed of the galleons and many of them fell prizes to Spain's naval enemies, the English and Dutch, entailing heavy losses upon the Royal Treasury and the private shippers, besides depriving the Philippines of their necessary supplies of coin. The voyages of the galleons were sometimes interrupted for two or three years at a time, and it happened once that five years elapsed between the departure of one *nao* and the arrival of the next. The consequent dearth of currency caused great misery. Early in the eighteenth century the merchants of southern Spain complained that their trade to Mexico was seriously impaired by the imports to that country from the Philippines of Chinese fabrics. As a consequence of their urgent representations to the King restrictions were placed upon the trade of the islands to the great detriment of their merchants. The operation of these

impediments and the expulsion of the non-Christian Chinese in 1755 caused a marked decline in the commerce of the Archipelago. At this period the only exports of native produce were sugar, cacao, wax, and sapanwood.

EARLY COMMERCIAL ENTERPRISES.

Following the banishment of the Chinese an attempt was made by the Spanish merchants to concentrate the entire trade of the islands in their own hands. An official order closed the shop of every Chinaman, and a company was formed with the intention of monopolizing the trade in the produce of the Philippines and the staple imports. The project looked promising, but it met with failure, owing chiefly to the inability of the Spaniards to secure from the Chinese traders as favorable terms as the latter had made with their countrymen.

About the same time a commercial corporation named the "*Compania Guipuzcoana de Caracas*" was created by Royal charter with certain privileges. The company enjoyed a practical monopoly of the trade between the Philippines and New Spain which was still carried on through the medium of the State galleons. This venture was not a success, and the charter was surrendered in 1753.

A much more pretentious undertaking was the "*Real Compania de Filipinas*." This company was authorized by Royal charter dated March the 10th,

1785, with a paid-up capital of \$8,000,000, in 32,000 shares of \$250 each. King Charles the Third subscribed for 4,000 shares; 3,000 shares were reserved for residents of Manila, and the remainder was taken up in the Peninsula.

The new company avoided the inter-colonial trade and devoted itself to the development of commerce between the islands and Europe and Asia. It was the first time that such a traffic had been attempted, or, indeed, permitted, and, considering the extremely favorable conditions of its inception, the enterprise should have had different results.

By the terms of its charter the "*Real Compania de Filipinas*" enjoyed the exclusive privilege of trade between the Philippines and the mother country, excepting such as passed between Manila and Acapulco, and it was allowed to import the produce of the islands free of duty. The company was further protected by a prohibition against foreign vessels carrying goods from Europe to the Archipelago.

All restrictions against the importation to Spain of the productions of China, India, and Japan, were abrogated in favor of the company. The pre-existing prohibition against direct traffic with China, and India, was removed to permit the Manila merchants and the company's ships to call at Chinese ports.

The company had the privilege of acquiring foreign-built vessels within two years of the date of its incorporation and of entering them under the Spanish flag free of fees.

The company could enter, duty free, all material needed for fitting out its ships and all supplies for their use.

In consideration of its charter and special concessions the company undertook to support and develop Philippine agriculture, and to expend, with this object, four per cent. of its net profits.

Despite its extraordinary advantages this great trading corporation was never prosperous. The opportunities for "graft" afforded by a concern of its magnitude were great, and of course were not neglected. Influence was exerted to secure lucrative and important positions for incapables, and general extravagance characterized the management. The system of making advances to irresponsible cultivators, which has become a fixed feature of agricultural methods in the Philippines, was instituted by the *Real Compania* and proved to be one of the chief factors in its failure. Lacking the right to enforce labor, it is difficult to see how the company could have contrived any very considerable development of the country, otherwise than by making loans as an inducement to the extension of cultivation. Vast sums were expended in this direction, for a considerable proportion of which little or no return was received.

The exclusive conditions under which the company operated tended to make smuggling a highly lucrative occupation, and the contraband traffic, which before the introduction of steamships was very difficult to

suppress, seriously impaired the profits of the *Real Compania*. In 1825 the company's affairs were at so low an ebb as to seriously threaten a collapse. For the time this was averted by increasing the capital in the amount of \$12,500,000. This could not, however, correct the inherent weaknesses of the enterprise, and in 1830 it was found necessary to revoke the charter of the "*Real Compania de Filipinas*."

THE COLONY OPENED TO THE TRADE OF THE WORLD.

Notwithstanding its disastrous ending the *Real Compania* had not lived in vain. Although the defunct corporation had lost the money of its shareholders its operations resulted in the utmost benefit to the islands. It gave a great impetus to agriculture and commerce, and was a potent factor in the prosperity of the Archipelago, which distinctly dates its commencement from this period. It also led the way to the removal of the crippling restrictions under which the trade of the Philippines had staggered up to this time.

In the year 1834 the port of Manila was thrown open to the trade of the world, marking an epoch in the history of the Philippines.

The Spanish authorities have always displayed a suspicious reluctance to admit foreign merchants to the country, and up to the last many officials entertained the opinion that the presence of aliens was prejudicial to the interests of the Colony. Previous to the opening of that port, permission to estab-

lish a mercantile house in Manila was seldom secured, and never without great difficulty, by outsiders. In 1844 a Royal decree was issued excluding foreigners from the interior, and as late as 1857 an attempt was made to enforce old laws against the establishment of foreigners in the Archipelago. Yet it is to foreign capital and enterprise that the commerce of the Philippines owes its permanent foundation, and the majority of the Spanish and native merchants found the beginnings of their business in the same sources. There was no Spanish capital in the islands, nor, after the failure of the *Real Compania de Filipinas*, any prospect of its coming there from Spain.

Foreign trade was hampered by burdensome regulations. The import duties on merchandise carried by foreign ships were double those imposed on goods brought by Spanish vessels. The tonnage charges on foreign ships laden with cargoes were double those on such ships in ballast, and if one of the latter landed but a small parcel the extra rate was exacted. These ridiculous port charges were abolished in 1869.

The commerce of the islands from its commencement until 1834 was centered in Manila, where the only custom house was located. After that year other ports of entry were created.

The currency of the islands has always been in a disorganized condition and subject to the fluctuations incident to a silver basis. The banking facilities were

inadequate, and are not yet fully equal, to the requirements of business.

OPENED TO THE TRADE OF THE WORLD.

Under the Spaniards no attempt was made to develop manufactures, with the single exception of cigars, and the lack of cheap and convenient land transportation militated against such development. The entire export trade of the islands depended upon the raw produce of the soil and the forest, which will always be the chief sources of wealth, although there is no doubt that the mechanical and mining industries will in time take a prominent place in the economy of the country. The first half of the nineteenth century was the nascent period of Philippine commerce. Its germination during two centuries had been a slow process checked by hampering regulations and cumbering conditions. Several circumstances acted at about the same time to relieve the trade of the most serious of these impediments and to give it a strong impetus. The most important of these favorable conditions were the operations of the "*Real Compania de Filipinas*," the cessation of restriction of export to the State galleons, the removal of the prohibition against direct trading with China; the abolition of the *nao* service; the independence of Mexico and the consequent establishment of direct traffic between the Philippines and Spain; and, most effective of all, the opening of Manila to the free commerce of the world.

A REVIEW OF PHILIPPINE COMMERCE.

Fifty years ago the Philippines were hardly known in the commercial centres of Europe, and its produce was not a factor in mercantile calculations. During the last half century, and especially since the opening of the Suez Canal in 1870, the trade of the islands has made great strides, and whilst still in its infancy, has given reliable indications of the possibility of immense development in the future. A review* of the commerce of the Philippines during the past fifty years is rendered somewhat difficult by the incompleteness of the Spanish records and the impossibility of tracing shipments to their ultimate source and destination through Hongkong, which is a free transshipment port and clearing-house for Oriental traffic. Following 1855, for several years these shipments seem to have been credited to China; then for another period of years to the "British Possessions"; and

* The following is a summary of the "Historical review and analysis of trade under Spanish and American occupation" contained in the Monthly Summary of Commerce of the Philippine Islands, December, 1904, prepared by the Bureau of Insular Affairs, Washington, D. C. The series of monthly summaries issued by the Bureau includes a detailed report of the trade of the Philippines, supplemented by instructive articles pertinent to the subject. It is a highly valuable publication to the merchant, or shipper, whose business relations in any way involve the trade, or industries, of the Archipelago.

finally, during the last six years of Spanish occupation, they again figure as Chinese trade.

A noticeable fact is that the exports have averaged in excess of the imports until recent years. In 1855 the export trade amounted to six millions and the import to five and, with occasional exception and variation in the proportions, this general condition obtained up to the termination of Spanish sovereignty. During this period the trade of the islands reached high water mark in 1880 and remained about stationary for the remaining fifteen years.

The prevailing balance of trade has been entirely subverted under the American administration. Both imports and exports have increased greatly, the former being nearly doubled. In the past five years the apparently adverse balance was: Two millions in 1900; five and a half millions in 1901; nearly five millions in 1902; one and a half millions in 1903; less than half a million in 1904; and a practical equilibrium was reached in 1905. Whilst the balance of trade is generally an indication of the prosperity, or otherwise, of a nation whose industrial economy is established, it is not a safe criterion in the case of an undeveloped country in a process of reformation. That the industrial energies of the people of the Philippines have been greatly stimulated contemporary with American occupation, in spite of insurrectionary disorders and misfortunes beyond human control, is evidenced by the large increase in exports. These,

during the last five recorded years of Spanish rule, averaged a scant twenty millions of dollars and can not be assumed to have increased appreciably during the years following, in view of the fact that they had remained virtually stationary at this average since 1880. Yet in the American quinquennial period 1900-1904 these average exports of twenty millions became about twenty-seven and a half millions, and testify to the stimulated productiveness and increased purchasing power of the islands.

The explanation of the recent reversal of the balance of trade is not far to seek. During the five-year period in question the scale of wages throughout the islands has largely increased and is said to average double what it was a decade ago. This, in connection with the enhanced prosperity denoted by the export figures, would naturally imply an increase in the purchasing power and inclinations of the masses. The presence of the army has been an important factor in producing the result in question. At the time of the heaviest import balances, there were from fifty to seventy thousand American soldiers in the Archipelago, whose pay for the most part was expended upon articles of foreign manufacture. Another potent factor in the exceptional imports is to be found in the item of ordinary supplies for a government conducted upon a much more liberal scale as regards public works and improvements than was its predecessor. A large proportion of these imports

were in the nature of permanent investments, and in an analysis carried to ultimate conclusions would be properly placed to the credit account.

It is not probable that the heavy relative credits in favor of exports in former years will again prevail, nor is it desirable that they should. A smaller balance, with larger investments of export proceeds in permanent improvements to increase production and raise the standard of living in the islands would make a more creditable showing than the large balances of the closing years of Spanish rule, which seem to have utterly disappeared without conferring any permanent benefit upon the country. Europe and Asia have been the chief sources of import, in approximately equal values, with America figuring almost insignificantly until 1900. It is a remarkable coincidence that the opening of the Suez Canal, which would naturally have been calculated to expand European shipments, marks a decided increase in the Oriental traffic, which, from that time, gained a lead over Europe and maintained it for many years. The present Oriental trade averages about thirteen millions of the thirty million total; Europe contributes about twelve millions and the United States practically the balance.

THE IMPORT TRADE.

Of the European countries, the United Kingdom and Spain have been responsible for the bulk of the

inward shipments. The former has been by far the most regular importer to the Philippines during the fifty years. In the pre-Suez period half the imports of the islands was due to her. The opening of the Canal brought no apparent increase to the British trade, but it is possible that some portion of her shipments may be lost to sight in the Hongkong credits. The record as applied to Great Britain is strikingly uniform, showing a steady, but moderate, increase. In the pre-Suez period the United Kingdom receives credit for an average of four millions in a total of seven and a half, and in the term from 1880 to 1904 her shipments have remained in the neighborhood of five millions annually, although the aggregate imports have quadrupled in the meantime.

The imports of Spain, whilst second in the European list, rarely amounted to one million prior to 1885. From that date they began to show a material increase, and under the protection of the tariff of 1891 her shipments grew to five millions, and exceeded those of the United Kingdom in 1894. During the period of American administration the imports of Spain have dropped back to an average of about two millions.

The import trade of Germany with the Philippines has shown a gradual growth, from small beginnings, during the half century, but seldom reached a value of one million dollars previous to 1900. Since that date, however, the annual average of German shipments has exceeded one and three-quarter millions.

THE BUSY PASS.

Looking towards the city from the lighthouse at the entrance to the river. Only vessels of light draft, such as the inter-island schooners, can come up to these wharves.

From Stereograph Copyright, by Underwood & Underwood, New York.



The figures for France have averaged in excess of two millions for the past five years, although they were comparatively insignificant in former times.

The American import trade with the islands, formerly of little consequence, has leaped into a leading place in recent years. In 1900 it amounted to two millions, and in 1904 to more than five millions, exceeding that of all other countries with the exception of the French Indies, whence the rice shipments are very heavy.

The chief items of Philippine import come under the general headings of clothing, food-stuffs, and manufactures of steel and iron. In the period from 1900-1904 these three classes of goods represent about two-thirds of the total average imports of thirty million dollars, and during the decade from 1885 to 1894 the proportion was even greater. In the latter period fibers and textiles, chiefly cotton and cotton goods, accounted for six million dollars; and in the American period for rather more. Since 1900 food-stuffs have taken the lead in the items of foreign purchases. This preponderance has been due to large importations of rice, the staple food of the natives. Rice was also the largest item in food imports during the Spanish decade under comparison, but not to such an extent as at present. The agricultural depression which is a natural sequence of war, the ravages of rinderpest, and other factors, account for this condition. Although it seems true that the Philippines ought

to produce a larger proportion of the staple article of food of its population, the fact of importing a considerable quantity is not necessarily an indication of unfavorable economic conditions. It is quite possible that many Filipino laborers can apply themselves to other branches of agriculture with greater profit than they would derive from growing rice, a low-priced product. In any case, with the present high scale of wages and the primitive methods of culture employed in the islands, it is more economical to buy the cheap production of Asia than to raise the grain. Unless a more scientific system of cultivation is soon inaugurated, the rice industry of the Philippines is in danger of extinction.*

An important fact, as indicative of development and improvement, is the large increase in recent years of the imports of iron and steel. In the comparative periods the average value of this class of shipments rose from eight hundred thousand dollars to in excess of two millions. Nearly half of this total is of American origin.

The United States has a practical monopoly of

*The cost of labor in the Chinese rice fields is about half as much as the cost of similar labor in the Philippines, but the adoption of economical methods would more than offset the difference. A Filipino will cultivate one hectare, yielding 1,500 pounds of paddy, at a cost for his labor of \$20 gold and board per annum. A Louisiana field hand receives \$200 a year and board, but he produces 160,000 pounds of rice. He receives ten times as much as the Filipino and, with the aid of scientific appliances, does one hundred times as much work.

the flour imports, and the same may be said of raw cotton.

There are still extensive fields of the trade of the islands into which the American shipper has not yet entered, or only tentatively, but the growth of shipments of manufactures from the United States to the Philippines is distinctly gratifying in view of the fact that it has been achieved in open competition. The imports from Spain in 1894 were but slightly greater than those of America ten years later, although the former were the culmination of relations extending over a long period and fostered by advantages over competitors. On the other hand, American enterprise has, in a comparatively short space of time, borne equal fruit in a new field where it has not enjoyed any tariff favors and has had to make its way in the face of the established trade of other countries. What has already been accomplished gives promise of an enormous extension of trade with this market after 1909, when the lapse of the restrictions imposed by the Treaty of Paris will permit of a readjustment of commercial relations with particular view to the mutual advantage of the two countries.

THE EXPORT TRADE.

The export trade of the Philippines has hitherto depended almost solely upon its agricultural products. Neither the rich mineral resources of the islands nor their facilities for cultivating the mechanical industries have ever been encouraged.

During the past fifty years the exports have been made up practically of hemp, sugar, tobacco, coffee, and copra, with the first two maintaining the leading places. In pre-Suez days these two articles, in nearly equal quantities, represented more than half of the total exports, which averaged ten millions. From the opening of the Canal until 1885 the sugar trade enjoyed its greatest prosperity, and the exports for this period of fifteen years averaged nine millions to five millions for hemp, in a total average export of a little short of twenty millions. Thereafter sugar continues to decline under the pressure of beet competition, whilst hemp makes a steady increase, favored by the natural monopolistic conditions of the industry. In the American period sugar has fallen into a minor place, with an average of barely three millions, in a total of twenty-seven and a half millions of exports and hemp has reached eighteen millions, being two-thirds of the total.

Tobacco has been generally the chief of the lesser exports with an average value of about two millions during the fifty year period. Coffee, which has virtually disappeared from the list of exports, reached its highest figure in 1889, with nearly two million dollars. Copra is the youngest, and one of the most promising, of the export articles of the Philippines. The development of the copra trade is of recent years, and during the American period it has passed tobacco in the value of its shipments and is closely approach-

ing sugar. Many of the products of the Archipelago, which are at present not represented in the list of exports, or only by unimportant shipments, are likely in the future to become considerable factors in its trade.

MANILA HEMP.

Manila hemp occupies a unique place amongst the products of the Philippines. The demand for it was long since established on account of a combination of peculiar qualities to which no other fiber can lay claim. It has been a staple article of commerce for a century, and although numerous attempts to raise it in foreign countries have been made, its native land remains the exclusive source of its supply.

Another exceptional feature of the hemp industry is the essentially primitive character of the cultivation of the plant and the method of extracting the fiber.

Maguey fiber has been an active rival of Manila hemp in many fields, but its chief advantage lies in a lower price, and so long as the quality of the latter is maintained at a high grade it need not fear competition.

Under these conditions of a natural monopoly in an exceptionally valuable commodity, produced from the abundance of nature, with the most rudimentary outlay of labor and capital, it might be inferred that the hemp exports of the islands would show a uniformity

free from the vicissitudes of industries exposed to severe competition and dependent upon the investment of large capital and the exercise of skilled labor. Such an inference is borne out by the figures.

Fifty years ago the hemp exports did not amount to twenty thousand tons. At the present time the outgo is six times as large, and the tables show that it has been attained by a constant and steady growth. The irregularities marked by exceptional figures are no doubt due to local and transitory conditions entirely independent of market influences. The great falling off in 1890, for instance, is accounted for by an exceptionally dry season.

At the end of the fifties exports of hemp had increased to twenty-five thousand tons yearly, and they fluctuate around that figure for the following ten years. The opening of the Suez Canal, and the extensive introduction to agriculture of automatic binders, gave impetus to the demand for the fiber. The upward trend of the trade continued until the last years of the Spanish *régime*. During American occupation there was, as might have been expected, some falling off, owing to the generally disorganized condition of labor and industry, but the slightness of the declines is remarkable, and is doubtless to be explained by the nature of the industry and the comparative ease with which it could be pursued even in times of disturbance. A reaction, however, sets in with 1901, and since then a new record average

has been made with one hundred and twenty-five thousand tons. The outlook for this, the leading export of the islands, is decidedly promising. It still enjoys its exclusive position in the market, the Philippines continues to be the only country that can produce it, and there is every reason to depend upon a constantly increasing demand. As has been intimated, there is but one danger threatening the prosperity of this trade, and that lies in a deterioration of the quality of the finished fiber, such as results from carelessness in the process of extraction. This detrimental factor has operated to the injury of the industry in the past, and in 1894 the merchants of Manila were obliged to take concerted action to check it. A recurrence of the same thing in recent years seems to demand drastic measures to preserve the place which Manila hemp holds in the markets of the world and in the trade of the Philippines and to prevent the impairment of its reputation and the possibility of its sinking to the level of inferior fibers.*

The act of March the 8th, 1902, which gave the American importer the benefit of the export duty, put an end to an anomalous condition in the trade.

* The interests of this and other Philippine industries would be served by a system of governmental inspection of exports such as exists in some of the Australian governments. At a time when the islands are seeking new markets, it is of the utmost importance that careless or conscienceless exporters should be prevented from bringing their products into disrepute.

Previous to this time the American manufacturer had derived his supplies of the fiber largely from Great Britain, incurring the cost of transshipment and the profit of the middleman. This feature of the Manila hemp trade is of long standing, its inception probably dating from the opening of the Suez Canal. In 1885 America made considerable purchases of the fiber in the British market; in 1892 nearly half of the imports of that article to the United States came from Great Britain, and as late as 1901 America received the greater proportion of its supply from the same source. At present these indirect imports are inconsiderable, and may be expected to cease altogether within the next few years.

THE SUGAR INDUSTRY.

The sugar industry in the Philippines presents a sorry spectacle of decay, with little encouragement to hope for future revival. With no other distinction in the markets of the world than the discrediting one of general inferiority in quality, Philippine sugar has suffered terribly in the losing struggle of cane sugar throughout the world during the past twenty-five years. Adverse local conditions have combined with market influences to bring about a serious state of decadence in the industry.

In earlier times, when the cane of tropical countries had no competitor, and when wasteful methods of extraction were universal, the Philippine product found

a ready market at profitable prices. The killing competition with European bounty-fed sugars was not met in the Philippines by any improvement in the primitive process of production, and the industry sank, as it must have done under any but conditions of the greatest economy in extraction. The very prosperous period of the Philippine sugar trade was between 1855 and 1870, when high prices ruled, but the response to this stimulus was only moderate, probably on account of the great distance of the country from the points of demand. The opening of the Suez Canal mitigated this disadvantage, and the exports immediately showed a marked increase. In the fifteen years preceding the opening of the Canal the exports had ranged from forty to fifty thousand tons. From the late sixties to the early eighties sugar shipments had quadrupled, with prices fairly constant at about three cents a pound, and this may be deemed the golden era of the Philippine sugar industry.

Meanwhile, the destructive competition with the beet product had already commenced. Germany was nearly doubling her output of beet sugar annually. Prices began to fall immediately after 1880, culminating in the sugar crisis of 1885. The three succeeding years were a time of the greatest depression in the industry, when production at the ruling prices was unprofitable. A reaction followed and prices and exports fluctuated throughout the remaining years of Spanish rule, but never again reached the figures that

prevailed previous to 1880. The annual trade during these last years approximated an average of two hundred thousand tons.

We have summarized the experience of the industry in three consecutive stages of its existence: a period of highly profitable prices, but small exports, in pre-Suez days; a period of fair prices, great activity and rapid growth, under the stimulus of access to the world's markets not yet surfeited by overproduction; and a period of low prices for fifteen years with a nominal increase in exports, during which the industry finds it yearly more difficult, with its primitive methods and low-grade product, to hold its own. In the keen competition that has disturbed the sugar industries of the world since 1885, the beet product has not only had the advantage of fostering bounties, but also of scientific inventions, tending to greater economy of production. In a less degree, as might be expected of an industry in the hands of Oriental people, sugar cane has also been the subject of improved methods, but in this respect the Philippines have lagged behind all other tropical countries. The old stone-mill, with its extraction of only forty per cent. of the weight of the cane in juice, and the ancient open kettle, with its low-grade product, are still the predominant features of the industry. That the Philippine sugar trade, with its antiquated methods, escaped extinction during the period of stress following 1885, is explainable mainly upon

the ground that cheapness of labor made a small margin of profit still possible. The afflictions—war, pestilence, and famine—that have visited the islands in the years immediately following 1896 were more than sufficient to cause the collapse of the tottering industry. During American occupation the exports of sugar have not amounted in any year to one hundred thousand tons, and we must go back thirty years in the history of the industry to find an analogous period of small production.

There seems to be no doubt that under scientific conditions of production, Philippine sugar could compete successfully with the beet and cane products of other countries. It is demonstrable that the adoption of modern economic methods of extraction would double the value of the output, thus enabling the producer to meet the increased rate of wages and secure a satisfactory profit at present prices. But nothing short of a complete reorganization of the industry upon an up-to-date basis can reinstate the sugar trade of the islands.

The most important customers of the Philippines for sugar, as well as for hemp, have been the United States and the United Kingdom. For many years following 1855 Australia was a large purchaser, but with the extension of production in that country its receipts of Philippine sugar gradually fell off and ultimately ceased. In 1890 the imports of the United States suddenly dropped from one hundred and thirty

thousand tons in the previous year to forty thousand, and half the former figures are more than the shipment of any subsequent year.

The cause of this sudden dispansion was the McKinley Act, which placed sugar upon the free list and put a bounty upon the domestic article. As a consequence the American importer was able to purchase in all markets upon equal terms, whereas he had previously been taxed according to quality. The immediate effect was that the low-grade product of the Philippines, which had enjoyed the quasi-protection of a comparatively low import duty, lost its best market and the American trade was transferred to the Dutch East Indies, with their superior output. Coincident with the withdrawal of American custom, exports to the United Kingdom increased, but after a few years this trade diminished and has now virtually died away. This is accounted for by the constantly increasing British consumption of the beet product, which has represented ninety per cent. of her sugar imports in recent years.

With the disappearance of the two customers upon whom his trade depended, the Philippine producer has been forced to look for a new market, and this he appears to have found nearer home. It is said that the taste for sugar among Oriental people has shown a marked development during recent years. Be that as it may, there seems to be no doubt that the imports of that article by China and Japan in the past

decade have increased to a surprising extent. Previous to the American occupation China was only a spasmodic purchaser of Philippine sugar, and considerable shipments to Japan have been made only since 1890. From 1885, the exports to Hongkong have been constant at about thirty-five thousand tons a year. There is reason to believe that most of these shipments have been in transit to China. Thus the Philippine sugar trade has since 1885 been gradually shifting its field from Great Britain and the United States to China and Japan. The grade of the article is better suited to the latter markets and there is ground for the belief that the trade in the new directions may be held and extended.

A hopeful feature of the cane sugar industry was created by the Brussels Convention, which, by removing the advantages derived from the European bounty system, has placed the beet product upon a basis of equal competition with cane. Despite his cruder methods, the tropical producer, with cheaper labor, can meet the beet manufacturer in a fair field without favor. It is true that the labor market in the Philippines has undergone a change in recent years which enhances the cost of the output, but this disadvantage can be offset by improvements in the process of production.

The great need of the industry at present, as it was in Spanish times, is capital. Producers are staggering under heavy indebtedness at exorbitant rates of

interest and the prospect of effecting the reorganization absolutely necessary to put the industry upon a paying basis, is remote without outside assistance.

The basic requirement of the situation is further tariff concessions to Philippine sugar by the United States. This would afford it an assured profit in the world market, encourage the capitalist, restore the confidence of the money-lender, and make it possible for the planter to pay higher wages, install improved machinery, and introduce a system of economic production.

Aside from the American producer, who appears to be quite unnecessarily fearful of the impairment of his interests, this plan has met with general approval. How long the representatives of a favored trust, with powerful influence in Congress, may be successfully able to oppose this, one of the most pressing needs of the Philippines, it is impossible to surmise.* That the proposed legislative action could not create a competition harmful to themselves seems to be a fair deduction from the fact that the United

* The influence of this same sugar clique may be traced in the miserly land act passed by Congress, which still retains its original form despite the urgent recommendations of the Commission for more reasonable concessions. Under the plea of safeguarding nearly seventy millions of acres of public demesne from falling into the hands of speculators, the limit of land that may be acquired by an individual, or corporation, is set at *less than the quantity necessary to establish a profitable sugar plantation.*

States at present consumes annually six times as much sugar as the Archipelago exported in its best year and about twenty times the amount of its output in recent times. It is reasonable to suppose that the tariff advantages in question would not have the effect of transferring the entire Philippine production to America, but that the trade with the Orient would be maintained at better prices, and, with every reasonable allowance for the extension of the industry under the more profitable conditions, it is difficult to conceive of the Philippines producing an amount of sugar equal to the present American consumption of the foreign product, which in 1904 exceeded seventy million dollars worth.

Many criticisms have been made of the Spanish policy in the islands, and especially of that policy which operated to discourage their industrial development and the growth of manufactures that would militate in any way against those of the mother country. In the face of these export figures in American times, and the above-mentioned opposition to relief, the question arises whether, in view of its oft-admitted responsibility for the welfare of the islands, the Government of the United States is justified in sacrificing vital interests of the whole Philippine people at the behest of a small but powerful clique of domestic sugar producers. On the one side is a Trust enriching a few millionaires with generous profits; on the other a country struggling for industrial advancement

in which the revival of this once prosperous industry would be a god-send to tens of thousands. This is one of the many Philippine affairs on which Congressional rhetoric is wasted. What is wanted is prompt and conscientious Congressional legislation.

TOBACCO.

For one hundred years from 1781 tobacco was a government monopoly in the Philippines. Every means was employed to stimulate production without consideration for the producer. The monopoly owed its inception to the chronic deficiency in the Insular revenues and soon became an important fiscal asset. In 1785 the revenue from this source amounted to thirty-nine thousand dollars; in 1844 it had increased to two and a half millions, and at the time of its abolition in 1882 the proceeds of the tobacco sales were sufficient to meet half the expenses of administration.

The official figures of tobacco exports are too irregular to afford reliable data of the annual production and trade conditions. The output was stored in the government warehouses and released in response to market movements, or the exigencies of the government, creating wide fluctuations in exports from year to year. Spain has always been the largest taker of the product. The United Kingdom was the only other purchaser of the Philippine leaf down to 1873, and her consignments seem to have been inter-

CLEANING ABACÁ.

A description of the process is given in the chapter on "Agriculture." A fortune awaits the man who shall invent a satisfactory substitute for the crude contrivance shown in the illustration.

Photo by Worcester.



mittent and irregular in quantity. From the last named year shipments began to take the direction of the British East Indies and China. The exports of manufactured tobacco have for a long period of years averaged about one million dollars in value. The distribution in this case has been much wider than in that of leaf. Spain, where the Regie system was in vogue, took a very small quantity of the Philippine cigars. The British East Indies has been the largest consumer during the monopoly period, and in the closing years of its existence received practically the entire export. In the years immediately succeeding 1855 China imported heavily, but the trade declined rapidly and expired before 1875. The United Kingdom and Australia also took considerable quantities for a long period.

In 1882 the monopoly was abolished with a resultant economic disturbance during the following few years of a transitory period preceding free production and trade.

In 1885 the leaf exports showed an increase to nearly thirteen million pounds, and in 1892, the best year since the monopoly, amounted to twenty-six and three-quarter millions. During the American rule the figures have shown a slight decline, with an average of about twenty millions of pounds in recent years. In the past decade Austria-Hungary has become an important factor in the leaf tobacco trade of the Philippines. In 1900 she purchased, through her

state monopoly, four and a half million pounds, and in succeeding years between two and four millions, but in 1904 the exports to that country were short of one and one-third millions. As might have been anticipated, the United States, aside from a few experimental shipments, has not been able to use the Philippine product.*

There has not been much change in the distribution, or quantity, of the exports of manufactured tobacco since monopoly days. This must not be accepted as an indication that production has been at a stationary figure. On the contrary, there seems to have been a great increase in domestic consumption under free conditions. The cigar and cigarette have come into general use among the islanders, and it is estimated that six-sevenths of the population smoke, and consume more than half of the total output of the weed. If such is the case, the stationary exports are quite consistent with enormous increases in manufactured tobacco.

Coincident with the establishment of free production and the removal of supervision, a deterioration in the quality of the leaf began and has continued

* There is reason to believe that, even though Philippine tobacco be admitted free to the United States, great difficulty will be experienced in finding an extensive market amongst American consumers, who are accustomed to qualities in their tobacco very different from those exhibited by the Philippine leaf. This, however, is an argument for the removal of the duty rather than otherwise.

with a consequent falling off in price, which has had a depressing effect upon the industry. Unfortunately for any hope of improvement in this respect the cultivation of the leaf is carried on almost entirely by small producers.

COPRA.

Copra is the latest of any Philippine industries to be developed to considerable extent. The facilities for the extension of the industry are practically unlimited and it gives great promise of future prosperity.

Although the cocoanut has always been an important factor in the domestic economy of tropical people it is only within recent years that copra has had a commercial value. During the Spanish *régime* shipments of copra to meet the limited demand of the confectioner and soap-maker doubtless went to swell the export figures of "coacoanuts," but it is not until the American period that the article figures prominently in the trade of the islands. The increased demand is due to new processes of converting copra derivatives into food products, a business in which the manufactures of Marseilles have become consumers of enormous quantities of the dried meat of the cocoanut.

The exports of copra in 1900-1904 average in excess of two and a half million dollars annually. In 1900 they exceeded three millions, and fell to half that amount in the following year, due to insurrec-

tionary disorders in the districts whence the chief supply is derived. In 1903 the figures approached four millions, to decline again in 1904 to nearly half as much as a result of exceptionally unfavorable climatic conditions. More than two-thirds of these shipments were made to France.

The copra industry is particularly suited to the conditions which prevail in the Philippines, and a bright future seems to be in store for it.

COFFEE.

The coffee exports of the Philippines ceased years ago to play an important part in the trade of the islands.

In 1855 about one million and a quarter pounds of the bean were shipped, and the exports increased steadily until they reached their maximum, with sixteen million pounds, in 1884. In 1889 the shipments exceeded thirteen and a half millions, but in that year the plantations were visited by an insect pest followed by a leaf blight with ruinously destructive effects. From that time the output declined precipitously, and at present is insignificant in amount. It has been claimed for Philippine coffee that it is equal to the product of Java, but the best prices obtained for it have not sustained this estimate. The chief consumers of the Philippine article have been Spain, the United Kingdom, and the United States, together with a considerable China-Hongkong trade hard to trace to the points of consumption.

The revival of the industry has been mooted, with a suggested American import duty on coffee in connection with free trade for the Philippine article. The plan has in its favor the past record of prosperity enjoyed by the industry and the known suitability of soil and climate to the production. On the other hand are serious adverse considerations. A coffee plantation requires large outlays of capital and ten or twelve years of waiting for the maturity of the trees. In the meantime there is the ever-present danger of a recurrence of the disaster which overtook the plantations fifteen years ago. When scientific safeguards against such calamities have been provided, as they probably will be ere long, the generous profits in coffee culture will doubtless attract all the necessary capital, but in the meantime the Philippines offer better and less hazardous fields for the investment of money.*

* Nothing could have been more wisely conceived for the benefit of the Philippines than the visit of the members of Congress under the guidance of Secretary Taft. At the time of writing the party is still in the islands, but the effects of their experience and some idea of its probable results, may be gathered from the following press report (August 16, 1905): "A majority of the members of Congress have been convinced that Philippine products ought to be admitted free of duty at our ports. Mr. Hill, of Connecticut, will no longer oppose a removal of the duty on tobacco and cigars, and Mr. Shirley, who represents a tobacco-growing district in Kentucky, agrees with him. Opposition to the free admission of sugar and other products has also been

The chief industrial need of the Philippines is a cheap and expeditious means of inland transportation. The projected railway system will supply this requirement and with its inception a rapid development of the resources of the Archipelago may be looked for.

THE TRANSPORTATION PROBLEM.

The Insular Government has been authorized to accept bids for the construction of 1,233 miles of railroad in the islands. Bidders must be citizens or corporations of the United States or the Philippines. The roads will be exempt from taxation, but must pay to the Government one-half of one per cent. of the gross earnings during the first thirty years, and one and one-half per cent. for fifty years thereafter. The Government will guarantee interest at the rate of four per cent. for thirty years on first mortgage bonds covering nearly the entire cost of construction and equipment.*

There are in operation two roads in the islands. That owned by the *Compania de la Tranvias de Filipinas* runs from the section of Tondo, in Manila, to

overcome by the statements of insular producers, who have been questioned by the visitors at several meetings held for this purpose. Mr. Grosvenor, of Ohio, says that at the coming session of Congress a bill providing for the free admission of all Philippine products will be introduced and supported by Mr. Payne, the chairman of the Ways and Means Committee."

* The routes of the proposed railroads are given in a later chapter.

Malabon, in the province of Rizal, a distance of 4.35 miles. The other running from Manila to Dagupan, in the province of Pangasinan, a distance of 121.79 miles, is under the control of the Manila and Dagupan Railway Company, Limited. The former is confined exclusively to passenger traffic. During the year 1902 it carried 562,089 passengers, and its income was \$53,965 Mexican.* The cost of operation was \$33,034 Mex., leaving a gross profit of \$20,931 Mex. The value of the entire property, including land, roadbed, rolling stock, and buildings is \$115,800 Mex., indicating a very low grade of construction and equipment. The Dagupan-Manila Railway was opened in 1894, and although it has suffered losses from destruction of property during the subsequent disturbances, it is a promising enterprise with a growing traffic. The gross income of the company during 1902 was \$1,238,235, and the gross expenditures \$864,532, leaving a gross profit of \$373,703 on a capitalization of \$12,300,000. During the same year, 1,104,372 passengers were carried over an aggregate of 23,591,024 miles, affording a gross revenue of \$683,206; a total of 165,760 tons of freight was carried an aggregate distance of 9,706,855 miles, and from this traffic was derived a gross revenue of \$397,699. The business of the road has increased considerably since American occupation.

*The exchange value of the Mexican dollar is fifty cents United States currency.

The Manila-Dagupan road has been authorized to construct two additional lines—one from Bigaa, a station on the existing line in the province of Bulacan, to Cabanatuan, in the province of Nueva Ecija; and the other from a point on the existing line about a mile north of the Manila terminus to Antipolo, in Rizal province. These two branches will aggregate 65.87 miles. The act granting the franchises for these roads requires the completion of the former before the close of the year 1905, and the latter not later than March, 1906. An electric road is in process of construction from the municipality of Pozorubio, in the province of Pangasinan, to Baguio, in the province of Benguet, a distance of twenty-seven miles. The report of the officer in charge of the work states that the road “will open up the most promising mining district in the Philippines, as the mines of Benguet yield copper and gold. Limestone cliffs furnish a fine quality of lime. Coal is found in the Bued river canyon. Hot sulphur and mineral springs abound. The mountains are covered with timber, and are crowned with forests of pine. Many of the fruits and vegetables of the Temperate Zone are successfully cultivated in Benguet.” Although not precisely relevant to a review of commercial and industrial conditions, it may be stated in passing that at Baguio will be established a sanatorium for invalid soldiers and civilians, and it will become the summer seat of the Government, in other words, the Simla of the Philippines.

One of the first works undertaken by the Government upon the establishment of peace, indeed it had been inaugurated under the military administration, was the improvement of the highway system of the islands. There is no means of ascertaining precisely how much, but several millions have been expended by the central and provincial governments in this direction, and it is proposed to continue the work until every province is amply supplied with good roads and bridges. It is a tremendous task in a country which has been conspicuous for the paucity of these ordinary avenues of communication and one in which the rains are so destructive. What are termed insular roads, that is, those running from one side to another of an island, or those connecting provinces, will be the sole charge of the Insular Government. Roads which lie entirely within one province and are of local benefit primarily will be constructed and repaired by the provincial board, for which purpose a tax of one-eighth of one per cent. on assessable land is levied. Where the necessity has existed the Insular Government has loaned money to the provinces in a large aggregate amount.

The facilities for ocean traffic between Manila and foreign ports have been quite equal to the requirements and have responded readily to increased demands of recent years. In addition to the army transports, the vessels of fourteen steamship companies make periodical calls at Manila on regular schedules. This service

is supplemented by a number of tramp steamers and a few sailing ships. A noticeable feature of the shipping trade is the scarcity of American bottoms; in fact, the flag of the United States is rarely seen afloat in Manila Harbor. In the year 1902 two hundred and fifty steamships visited Manila, and of this total but fourteen were of American register, whilst of seventeen sailing vessels twelve flew the American colors.

The open ports of the islands are Manila, Luzon; Iloilo, Panay; Cebu, Cebu; Jolo, Sulu; Zamboanga, Mindanao; Appari, Cagayan, Luzon.

An extensive interisland commerce has been carried on since the opening of the islands to foreign trade in 1834, and it is constantly increasing. This has been noticeably so since the extension of the export trade during the American administration. There were in 1902 engaged in this coastwise trade 1,469 sailing vessels and 175 steamers of fifteen tons register and over. There are a number of smaller craft navigating the waters of the Archipelago which can hardly be considered factors in its commerce, although engaged in petty local traffic.

During American occupation the number of ports and subports available for interisland traffic has been increased from 63 to 196. The Insular Government has neglected no means to encourage and foster the maritime traffic of the Archipelago.

Manila has been in the past one of the least invit-

ing ports of call in the East for merchant vessels because of the extraordinary difficulty and expense of handling cargoes, and consequently freight charges to this point have been excessive. The rates were as much from Hongkong to Manila as from Hongkong to San Francisco, although the distance in one case is ten times as great as in the other. As ocean vessels could not approach nearer than two miles to the shore at Manila, lighters were necessarily employed in loading and unloading. The harbor, with its one hundred and twenty miles of coast line, was subject to almost the full force of storms, and during the monsoon season ships not infrequently lay eight or ten days, incurring heavy demurrage, whilst awaiting an opportunity to discharge or take on freight.

The Insular Government has projected extensive improvements which include the construction of an effective breakwater, and an ample system of docks, with a deep water approach. The work is being rapidly pushed toward a conclusion, and in the near future these and other facilities will make Manila the most accessible and convenient port in the Orient.

This is only one of several factors which must make for a great expansion of the trade of the Philippines in the next decade.*

* Tables showing the export and import trade of the Archipelago for the past fifty years are incorporated in the Appendix.

AGRICULTURE.

VII.

AGRICULTURE.*

Musa Textalis: Manila Hemp—Conditions of Culture—Method of Extraction—Expenses and Profits Involved in Hemp Cultivation—Maguey Fiber—Cotton Fiber—Cane Sugar—Tobacco—Not a Promising Channel for Capital—A Proposed Remedy for Present Depression—The Coconut Palm and its Derivatives—Copra and Coconut Oil—Possibilities of the Industry Under Improved Methods—Estimated Expense and Profit in Coconut Plantation.

The chief source of wealth in the Philippines since the Spanish conquest has been its agricultural products, and so they will probably continue to be. The soil of the islands consists mainly of decomposed volcanic rock, enriched by decayed organic matter. It is extremely fertile, readily yielding generous crops of tropical and subtropical growths. The range of vegetable products is very wide. About three hundred fiber plants of either commercial or domestic value are found in the Archipelago, and the variety of food producing plants is great. Tropical fruit trees yield abundantly with little or no aid, while corn, grain, potatoes and other vegetables bounteously repay cultivation. There are a number of plants from

* Money values in this and succeeding chapters have all been reduced to their approximate equivalents in United States currency.

which gums, dyes, oil and medicinal extracts may be derived.

The chief products of the soil are hemp, sugar, tobacco, copra and rice, and of these the first named is of foremost commercial importance.

MUSA TEXTALIS—MANILA HEMP.

The *musa textalis* is a member of the banana family, and is hardly distinguishable from the plant that yields the edible banana. It is locally known as *abaca*. The term "Manila hemp" is a misnomer, but is thoroughly established in the trade. As a matter of fact, true hemp is a bast fiber, whereas *abaca* is a structural fiber. The *musa textalis* is found only in its natural habitat, the Philippine Islands. Unsuccessful efforts, extending over the greater part of a century, have been made to cultivate the plant in different parts of the world, and it is a safe conclusion that it cannot be made to produce a commercial fiber elsewhere than in the Archipelago. There, however, it grows wild and under cultivation in several of the islands. The province of Albay, in Luzon, including the dependent island of Catanduanes, is the principal *abaca* district of the Philippines. Large quantities are also produced in the adjacent provinces of Ambos Camarines and Sorsogon. Other productive sections in Luzon are La Laguna and Cavite and, to a less extent, Bataan and Batangas provinces. The output is large from the islands of

Leyte, Samar, Marinduque, Masbate, Romblon, Panay, and Bohol. Considerable quantities of *abaca* are also produced in the northern and southeastern portions of Mindanao.

The fiber has undoubtedly been used by the natives for centuries, but it is only within the past sixty years or so that its remarkable tensile strength, lightness, length, and durability have become known and appreciated by the commercial world. Previous to 1825 the production was small and practically none was exported. With the development of the foreign market the fields of the petty cultivator gave place to extensive plantations, but the primitive methods of the producers have undergone little if any improvement.

The industry is capable of great expansion, for only a fraction of the large areas suitable to the growth of the plant have been brought under cultivation.

CONDITIONS OF CULTURE.

For the successful culture of the *musa textalis* fertile land, subject to a liberal rainfall, in a climate of high humidity, is necessary. The drainage must be good, for the plant will not thrive in swampy soil. It should be sheltered from excess of wind or sun. *Abaca* is easy to raise, requires little tending, and is peculiarly free from liability to accidents. It is not subject to drought; its low stature and environ-

ment protect it from the effect of hurricanes; its station upon hilly slopes safeguards it from inundations; fire cannot make headway against its juicy leaves and moist stem; and it is practically exempt from the attacks of predatory insects.

No scientific effort has been made to develop, by cultivation, the desirable qualities of the plant and the possibilities in this direction are promising, for almost every valuable vegetable growth, which has been the subject of intelligent investigation and experiment, has proved to be susceptible of more or less improvement.

A plantation is started from seed or suckers. In the former case maturity is reached in about three years; in the latter six months earlier. After this stage, harvesting is practically continuous. The plants are set out in rows, from two to three yards apart each way, with a certain amount of herbage left between, to prevent washing away of the soil. Trees are left standing in the field, or are planted, in order to furnish the requisite shade and to break the force of high winds. The trees selected for this purpose should have small leaves, that they may not create a dense shadow, and deep feeding roots that will not rob the young plants. The best time for planting is during the rainy months of May-July and September-November. In August, January, February, and December, the heat of the sun is sufficiently strong to injure, and perhaps kill, the

shoots. During growth, and after maturity, the plantation needs little attention beyond rough weeding. After cutting, the crop renews itself by means of the suckers which are thrown off by the roots of the original plant.

METHOD OF EXTRACTION.

Harvesting is most expeditiously effected by the employment of gangs of three laborers. One cuts the stalk even with the ground and strips it. The second, who is usually a woman, splits the leaf-sheaths into sections, two or three inches wide, discarding the inner portions which have an undue proportion of pulp. These strips are then subjected to a crude mechanical process by means of which the fiber is extracted. The machine employed consists of a long block of wood, elevated upon legs. In the center of the block a knife blade is attached and arranged so as to work in unison with the action of a spring above it, or a treadle below. The spring exerts a constant upward pressure upon the handle of the knife and so depresses the blade, whilst pressure upon the foot-lever counteracts this effect. The strips of leaf-sheath are drawn by hand over the block and beneath the blade, whilst the operator regulates, or releases, the pressure of the latter by means of the lever. This process separates the moist pulp from the fiber. It may be repeated several times with the effect of producing a finer, and consequently more

valuable, fiber, with, however, a corresponding diminution in weight. The best fiber is produced by using a blade with a smooth edge, but, as serrated knives render the operation easier, they are commonly used at the expense of quality in the output. When the process is not thorough a considerable portion of the juicy pulp is retained. This discolors the fiber and reduces its strength, but it also increases the weight, which is an important consideration to the laborer. This is a feature of the industry that calls for correction. Perhaps the remedy lies in the invention of a machine which will dispense with the present manual process and turn out a uniform quality of fiber. There have been many futile attempts to devise such a mechanical contrivance, but it should not be too difficult an achievement for American ingenuity. The present method of extraction is said to waste from twenty to thirty per cent. of good quality fiber. Portability is no less necessary than economy in a hemp machine. The stalks of the plants are very heavy and within a few hours of being cut up the leaf-sheaths must be subjected to the knife, so that it is found more economical to transport the apparatus than the material. As the work is done on very rough ground and generally upon mountain sides, a machine, to be practicable, must be light enough to be easily carried by two men.*

* "The honor of having practically solved the question seems to have fallen to a young American engineer,

After extraction, the fiber is exposed to the sun for a few hours and, when sufficiently dried, is loosely packed in bundles and carried to the nearest market, of which there are several in each hemp district. The principal grades recognized are "current," "second," and "colored," with several gradations in these classifications.

The "beneficiary" system of labor is in vogue in the hemp districts. Under this system the planter assigns to each native cultivator a section of ground on which to raise and tend plants and at intervals to extract the fiber. One-half of the produce represents the operator's pay for his labor, and at the time that he makes delivery to the planter he receives the current local value of his share. This system appears to have been sufficiently profitable to the capitalist, but it has serious drawbacks. Under it the planter cannot exercise sufficient control over his property

Robert Edward Lindsay. Doubtless the machine invented by Mr. Lindsay will undergo many improvements; but in its present form it is reported as being capable of turning out sixty pounds of first-class white hemp of uniform quality, every hour by the labor of two men. Under the existing system an average hemp worker can strip about forty-four pounds of fibre in a day." Brigadier-General W. H. Carter, U. S. A., in *The North American Review*, May, 1905.

A similar claim has been made for several machines which appeared to offer a solution to the complicated problem, but it has always transpired, upon test, that some essential requirement was lacking in the device, or else that its operation was less economical than hand labor.

and its produce. He cannot prevent the cutting of immature plants and carelessness in extracting the fiber. When a native cultivator is in urgent need of a few dollars he will often sacrifice unready plants and rush the process of extraction, with the result of injuring the plantation and putting an unnecessarily low-grade article upon the market. However, when all is said, hemp cultivation on a large scale is, with the possible exception of cocoanut culture, the most profitable and least risky field for the investment of capital offered by the Philippines to-day.

EXPENSES AND PROFITS INVOLVED IN HEMP CULTIVATION.

Foreman gives some figures relating to outlay and income in hemp cultivation which may be of interest. Perhaps it is unnecessary to make any allowance for the increased cost of labor, because in an industry of the monopolistic character of *abaca* prices can always be adjusted to cover enhancement in cost of production.

The labor of plant-setting in Albay Province may be calculated at \$1.50 per 1,000 plants; the cost of shoots at from 25 cents to 50 cents per 100. Frequently, however, the capitalist will contract for the laying out of a plantation, on the basis of \$5 for 100 live plants, to be counted at the time of full growth, instead of paying for shoots and labor. In case this

is done it is customary to make advances to the contractor.

The following is, subject to the qualification made above, a conservative statement of the investment, profit, expenses, etc., of operating a plantation in Albay, but as the figures are based upon those of a plantation of half the size it may be assumed that a corporation or individual with the capital and facilities for operating upon this, or a larger, scale would produce fiber at less cost and consequently at greater profit.

Plantation of 1,000 *pisosones*, or 3,472 acres, of land over two years planted with shoots and therefore ready to cut within one year from date of purchase. No ploughing needed; no fallow land. Each *pisoson* (3.472 acres) producing per annum 10 *piculs* of *abaca* (equivalent per acre 3.60 cwts., yielding from 3,472 acres 624.50 tons), or a total output of 10,000 *piculs*, making 5,000 bales, in the assumed proportion of 80 per cent. *Corriente*, 10 per cent *Segunda*, 10 per cent. *Colorado*:

INVESTED CAPITAL.

1,000 <i>pisosones</i> of land at \$50 per <i>pisoson</i>	\$50,000.00
Store for 1,000 <i>piculs</i> of <i>abaca</i> , with ample space.	3,000.00
Bale press and shed for pressing 200 bales per day	2,500.00
Plot of land for store and sun-drying ground	700.00
4 horses and two vehicles	300.00
Unrecoverable advances to 200 men at say \$5 each	1,000.00
Total invested capital	\$57,500.00

WORKING EXPENSES.

Salaries: Manager	\$1,800.00
2 European bookkeepers at \$750 each	1,500.00
4 Native storekeepers at \$15 and \$10 per month	600.00
8 Plantation overseers at \$10 per month	960.00
4 Native messengers at \$4 per month	192.00
Labor: for pressing 5,000 bales at 9 $\frac{3}{8}$ cents; plus	
2 mats per bale at 87 $\frac{1}{2}$ cents per 100; and 14	
split rattans per bale at 87 $\frac{1}{2}$ cents per 1,000	468.75
Waste in store of hemp mats, rattan, etc.	163.50
Stolen by laborers, say	200.00
Maintenance, or depreciation, of press-value at 8	
per cent. per annum	200.00
Fire insurance on Store, Bale, Press, and Shed, at	
2 per cent. on \$5,500	110.00
Keep of four horses per annum	96.00
Manager's traveling expenses about the province..	200.00
Taxes of various kinds	1,000.00
Office expenses, telegrams, postage, stationery, etc..	150.00
Freight to Manila at 12 $\frac{1}{2}$ cents per <i>picul</i>	1,250.00
Loading at 2 $\frac{1}{2}$ cents per bale	125.00
Insurance at Manila at $\frac{1}{2}$ per cent. on \$32,200	
(Manila selling value plus, say 15 per cent.) ..	159.00
Manila broker's commission including landing, dis-	
charging, etc., at 2 per cent. on sale value	541.25
Manila storage at 1 $\frac{1}{2}$ cents per bale, per month,	
say, for half a month	37.50
Total working expenses	<u>\$9,753.00</u>

RETURNS.

Sale: Half of the above output of 10,000 *piculs* belongs to the planter; the other half is purchased from the laborer; therefore: 5,000 *piculs* sold thus:

A ROPE WALK.

The famous "Manila" rope is thus made from abacá on the outskirts of the capital, like most other industries, by a laborious old-time process.

From Stereograph Copyright, by Underwood & Underwood, New York.



4,000 <i>piculs</i> (<i>Corriente</i>) at \$4.25; 500 <i>piculs</i> (<i>Segunda</i>) at \$3.87½; 500 <i>piculs</i> (<i>Colorada</i>) at \$3.12½	\$20,750.00
Gain in price on 5,000 <i>piculs</i> , laborers' share bought at 75 cents per <i>picul</i> under Manila market price	3,750.00
Manila firms pay 50 cents per bale for pressing ..	2,500.00
Total receipts	\$27,000.00

OUTCOME.

Sale in Manila	\$27,000.00
Deduct working expenses	9,753.00
Net profit (25 per cent. on total capital)* ..	\$17,247.00

In addition to the enormous quantity of hemp that is exported annually, a large amount is consumed in domestic manufactures, especially of cloth. The most extensively used of these fabrics is known as *sinamay*, a product entirely of hemp fiber. *Jusi* cloth is made from a mixture of fine hemp and pine-apple-leaf fiber, sometimes with an admixture of silk. A very beautiful diaphanous material called *lupis* is manufactured in small quantities from a special

* Thirty per cent. net is generally accepted as the standard profit in hemp cultivation. American methods of organization will doubtless work extensive economies in this and other industries. Before long we shall see the planter, exporter, importer, and possibly carrier, combined in one corporation.

quality of hemp, which is much finer and more difficult to extract than the commercial grades.

MAGUEY FIBER.

Maguey is the name applied to the fiber of the *agave americana*, or century plant. The aggregate of fibers produced by the *agave* family is a large item in the world's output of fibers. In 1891 about eighty thousand tons of raw maguey fiber, valued at nine million dollars, entered the United States alone.

The *agave americana* is cultivated on several of the Philippine Islands, but not nearly to the extent that it might be with profit. In 1901 the exports of maguey amounted to less than nine hundred tons, valued at about one hundred dollars a ton. In subsequent years these figures have increased considerably, and although the trade is still very small, the industry exhibits a tendency to expand. There is a ready market for the fiber at profitable prices. It is used extensively in Europe and the countries of both North and South America in the manufacture of ship's ropes and cables, in the making of ropes for mines, for lines, nets, weavings for hammocks, etc. With increased production, the Philippines should be able to compete with Central America in the trade, and there is every reason to believe that desirable markets for this fiber might be opened up in some of the Oriental countries.

A number of machines have for several years been

used extensively in Mexico, Central America and the West Indies for the extraction of sisal fiber from *agave sisalana*. This plant, though producing a coarser fiber than *agave americana*, is so nearly like it in the size and texture of the leaves that no doubt some of these machines could be adapted to the extraction of maguey. The present method is by maceration, followed by rubbing and scraping. The essential principle of the machines, which clean one hundred thousand leaves and upwards a day, is that the pulpy substance is scraped from them without their being fermented, or macerated, thus saving considerable time and labor.

COTTON FIBER.

Cotton is grown in various parts of the Archipelago, but not in sufficient quantities to create an export trade. The most productive district is Ilocos Norte. At one time a long staple fiber was extensively cultivated in the province. A good quality of cloth was made from it and exported in considerable quantities. At the instigation of the Government this trade was neglected in favor of tobacco, and subsequent efforts to revive the industry have met with only partial success. Cotton spinning and weaving is at present carried on in Ilocos, solely with a view to meeting local demands. The fabric is produced from home-made looms of the roughest description, the weavers being women.

It is impossible to ascertain to what extent local produce enters into the domestic consumption of cotton fiber, but one hundred tons would probably be a high estimate, and that is an insignificant figure beside the amount imported.

There are localities in the Philippines suitable to the growth of cotton, and the general conditions are favorable to its cultivation, so that the industry may be expected in time to develop, at least to the extent of supplying a much greater proportion of the domestic demand.

In several provinces of the Philippines the pineapple is grown for the exceptionally fine fiber which is derived from the leaves. The fabrics called "*pina*" and "*rengue*" are used in large quantities in the islands and are becoming popular in both Europe and America. The current prices of the fabrics range from twenty-five to seventy-five cents a yard, and a ton of the fiber brings about \$150 in the London market. Pineapple fiber has several highly commendable qualities, but as about twenty thousand leaves must be handled to produce fifty pounds of it, the industry is not likely to assume commercial importance until extraction can be effected by the more economical agency of machinery.

CANE SUGAR.

After thirty years of prosperity, the sugar industry of the Philippines fell upon evil days, and since

1896 it has been engaged in a bitter struggle for its very existence. When one considers the accumulated misfortunes of the planters during recent years, it is to wonder that any of them have had heart to sustain the conflict and to wish them heartily the better luck that they deserve. First came the killing competition of the beet product, followed by continual fluctuations in the price of cane sugar; then war, rinderpest, cholera, famine, and locusts. Under this weight of disasters the industry was crushed out in many sections, and in 1901 the entire crop of the Archipelago amounted to only two million piculs,* of which three-quarters was produced in Negros Occidental.

The needs of the industry are threefold: (1) Admission of the product to the United States free; (2) investment of capital; (3) establishment of the most improved methods of production. The first is the all-essential factor, and a realization of it would be followed by the other desiderata in the natural course of things. Under present conditions the planter's profit barely pays interest upon capital in Negros where the process of manufacture is more economical than elsewhere.

Sugar production requires a greater outlay for its successful prosecution than any other agricultural enterprise available in the Philippines. In order to start a *hacienda*, land must be purchased, and one hundred acres would be a small plantation. This,

* A picul equals 137½ pounds.

in Negros, would cost from \$35 to \$70, according to whether it was cleared or not, and would yield from 200 to 300 tons of cane. It would be necessary to erect buildings and install machinery; to purchase draft animals and implements; and to make advances to laborers. The initial expenses of establishing a one-hundred-acre plantation would probably be about \$25,000, aside from the working capital, which would be nearly half as much. Wages have doubled, and the price of everything that enters into the manufacture of sugar has increased in recent years so that, whilst the cost of producing a *picul* of sugar was about \$1.50 ten years ago, it is now twice as much.

In Negros, European mills are in operation almost exclusively, but there is not such a thing as the modern refining plant in the islands. Elsewhere than in Negros the antiquated cattle mill is the rule. The process, too, in Negros is superior to that in general use, giving a much greater percentage of extraction than the average of other sections.

In the northern provinces the sugar plantations are worked upon the *sistema de inquilinos*, that is, the tenant, or "beneficiary," system. In the Visayas the plan of day labor prevails, and this might be the better arrangement but for the fact that the practice of making advances is inseparable from it. In order to secure the required field hands the planter is often obliged to pay several weeks wages before a stroke of work is done, and the greatest caution is

necessary to avoid heavy losses. On large estates it is often found advisable to employ subdivisional managers who are allowed an interest in the enterprise.

Students of conditions in the Philippines and economists who have investigated the sugar situation all arrive at the same conclusion, which is, that the salvation of the industry depends upon relief legislation, and that failing such aid the export trade is in serious danger of extinction.* The planters do not look for a large export to the States, but free or preferential entry of their product here would insure better prices for it in the Oriental markets.

TOBACCO.

All the commercial tobacco of the Philippines is grown in northern Luzon, and the best of it in the provinces of Cagayan and Isabela. A considerable quantity of leaf is raised in the Visayas, but it is of a poor quality, quite unfit for any but the local market.

The Cagayanese have not yet learned to appreciate fertilizers, and so they prefer the bottom-lands to

* There is promise of legislation favorable to the Philippines by Congress early in 1906. It is probable that all the insular products will be placed upon the free list, with the exception of sugar and tobacco, upon which 25 per cent. of the present impost will be retained. Secretary Taft has under serious consideration the establishment in Manila of a bank on the plan of the Egyptian Agricultural Bank. Such an institution would solve many problems and give new life to agricultural enterprise.

higher ground for growing tobacco, although fields in the former are frequently inundated to the injury or destruction of the crops. Seed beds are prepared between July and November, according to whether the plants are to be set in high or low land; and transplanting takes place from six weeks to two months after sowing. The beds should be carefully irrigated and protected against excessive heat and rain by means of portable bamboo shelters, but this is rarely done, except upon plantations which are conducted by Europeans. In the days of the monopoly the native was compelled to take these and other measures for the benefit of the plant, but now, according to the Governor of Cagayan, "he simply sows the seed and leaves the rest to Providence."

The ordinary methods of ploughing, planting, hilling, and topping are followed more or less carefully, according to the energy or intelligence of the individual cultivator. The tobacco worm is the bane of the planter here as elsewhere. The family of the farmer are out from daybreak until 8 or 9 o'clock fighting the pest and again from sunset until dark, or perhaps later if the moon serves. The more careful growers, and the hired laborers of the larger plantations carry on the work by night with torches. The worms originate from a small white night moth which lays its eggs upon the leaf. It is possible that a remedy might be found in the strong acetyline lights which have been effectively used in India to lure locusts and destructive beetles to their death.

If the process of planting is haphazard, that of curing is much more so with the generality of cultivators. Hardly ten per cent. of them use curing sheds. The majority expose the leaf to the sun until it loses its green color and then hang it in the house until drying is completed. Where a shed is used it is usually nothing more than a *nipa* roof on posts. Sometimes movable walls of bamboo mat are added. In monopoly days the Government erected large curing sheds at different points and, in addition, required each planter to build a small one at his own expense.

After drying, the leaves are piled to allow fermentation to take place. They are then sorted by women and made up into hands of ten leaves each. Ten hands are rolled into a bundle and tied together. Forty of these bundles go to a bale, which, therefore, contains four thousand leaves. Five grades are recognized by buyers, but the classification is somewhat elastic, especially when the demand is good. The leaves of the first class should be forty-five centimeters in length, and clean and sound; those of the second class thirty-nine, and of equal quality to the former; those of the third are also first quality leaves, twenty-six centimeters in length; the fourth class are defective leaves, twenty-four centimeters long; and the fifth class somewhat shorter and of the same character as the fourth. If a bundle of first class length contains six, or more, low-grade leaves it is put in the second class; if the number of impaired leaves exceeds twelve, it goes to the third class; and if they exceed twenty, to the fourth.

The buyers put the leaf through a final process of fermentation to improve the color, and re-sort them with the object of attaining a higher classification than that upon which they were bought; they are then repacked in bales of three quintals (about 300 pounds) each and carried to Aparri, whence they are shipped to Manila.

NOT A PROMISING CHANNEL FOR CAPITAL.

Hon. G. Gonzaga, Governor of Cagayan, who is interested in the business, gives some figures on cost and returns which would apply to a plantation run with hired labor. The estimate is based on one *hectare* (2.471 acres) of land, and it may be supposed that an operation upon the scale of one hundred *hectares* would show some economy over these figures, but probably not much, with the same methods. One *hectare* of low land is valued at \$100 at least, and of high land at \$50.

Labor and animals would be required for ploughing the seed bed and the field; for tending the former and transplanting the shoots. Four men would be needed for forty days in caring for the plants during growth, hilling, and topping, and removing worms. Next, there would be the work of cutting and transferring the leaves to the drying shed. After that, sorting, fermenting, and baling.

Mr. Gonzaga's estimate of the cost of this labor is say \$75 gold, and he concludes that the operation

on the present basis of production would result in a loss of about \$8.80.

The Governor admits, however, that very much better returns are possible. Like capitalists in other agricultural industries he complains of the unaccustomed increase in the price of labor, to which there has hardly been time for adjustment. It is rarely, he says, that a *hectare* produces fifty bales. On the best lands the plant only yields an average of fifteen leaves, which would give thirty-seven bales and twenty hands. He adds, however, that if the tobacco is cultivated as it should be it is an easy matter to secure fifty bales—three bales of the first class, five of the second, eight of the third, ten of the fourth superior, nineteen of the fourth current, and five of the fifth. On this basis the output would be:

INCOME.

Proceeds from tobacco leaves from one <i>hectare</i> of land:	
3 bales, first class	\$21.38
5 bales, second class	22.50
8 bales, third class	16.00
10 bales, fourth class, superior	10.00
19 bales, fourth class, current	14.25
5 bales, fifth class	1.25
Total receipts	85.33

This is only about 11½ per cent. return on the working capital, and makes no allowance for interest

on the money sunk in land, buildings, and draft animals, which would amount to about \$350 per *hectare*. In the crop of 1903 the proportion of the different classes of tobacco produced in the province of Cagayan was as follows:

First class, 1.2 per cent., or, in a crop of 50 bales, 0 bales, 24 hands.

Second, 3.1 per cent., or, in a crop of 50 bales, 1 bale, 22 hands.

Third, 6.5 per cent., or, in a crop of 50 bales, 3 bales, 10 hands.

Fourth, superior, 11.7 per cent., or, in a crop of 50 bales, 5 bales, 34 hands.

Fourth, ordinary, 31.1 per cent., or, in a crop of 50 bales, 15 bales, 22 hands.

Fifth, 46.4 per cent., or, in a crop of 50 bales, 23 bales, 8 hands.

The figures do not seem to invite the investment of capital in the direct cultivation of tobacco in the Philippines. In 1883, the year after the abolition of the monopoly, a company was formed in Spain styled "*Compañia General de Tabacos de Filipinas*," with a capital of \$15,000,000 gold, for the purpose of growing and dealing in tobacco. It established large plantations and factories and entered into extensive operations, including the manipulation of other produce. The venture was a failure, but the result may be attributed in large measure to bad management and lack of experience of local trade conditions.

The estimates of expense in the foregoing calculations do not apply to the small native cultivator, in whose hands the greater part of the industry rests at present. He secures free labor almost entirely. The whole family is impressed into service, and each grower helps others in the vicinity. When the time for ploughing arrives five or six neighbors come, with their implements and *carabao*, and afterwards their women folk and children aid in the transplanting, and the work is done in a few days. This labor is paid for in kind. After transplanting, the cultivator leaves the care of the field to his wife and children, who also cut the leaves and attend to the curing and sorting. Of course, such a method must give crude results, but it is highly economical, and the native tobacco farmer considers the receipts from his patch clear profit. He takes no account of money invested in land, or animals, nor ever thinks of forming a sinking fund for emergencies. If he has a good year he spends the proceeds; if a bad one follows he has recourse to the Chinese, or Filipino, leaf traders for a loan, at fifty per cent. interest, payable from the next crop. If the succeeding crop fails to meet expectations he becomes more deeply involved and in all probability ultimately loses his land.

A PROPOSED REMEDY FOR PRESENT DEPRESSION.

The tobacco industry, like almost every other, has suffered from the series of calamities, which have be-

fallen the Philippines in recent years, and the present situation is one of critical depression. Mr. Gonzaga suggests a remedy which would involve the introduction of capital in what might be a profitable field, if the operations were in the hands of thoroughly experienced men. The Governor's idea is the establishment of what he calls an "agricultural bank," but which would necessarily develop into a trading company with a very wide scope. The company would "lend money to the farmers on mortgage at a moderate rate of interest, say six or eight per cent. The bank could engage in the tobacco industry, both as a means to assure payment of its credits as well as to improve the price of the article, and destroy the monopoly of the commercial companies. For this purpose the bank should have agents and branches in the markets of Europe and America for the exportation of tobacco and for the importation of rice* and other articles needed by the inhabitants of the province. In order to supply the lack of work animals, and to provide against droughts, the bank could engage in the work of irrigating the fields† to be used in the cultivation of tobacco and cereals; of bringing

* Doubtless Governor Gonzaga intends to intimate that agencies for the exportation of rice could be established in Asia. American rice cannot be imported to the Archipelago with profit, although it may be after the opening of the Panama Canal.

† The niggardly terms of the Philippine Land Act are expanded somewhat in favor of irrigation companies.

in plows and portable irrigation pumps, and of working the fields for a small compensation in money or crops.”* There is no doubt that the completion of the railroad through the tobacco district will make for a return of prosperity to the industry.

Opinions differ widely as to the quality of the Philippine product, and this may be largely due to the fluctuations of the quality since the cessation of the monopoly. Many experts maintain that the best Philippine tobacco is excelled only by the Havana leaf for cigars, and those who become accustomed to the soft flavor of the Manila cheroot are apt to prefer it to anything else. The author of the “Soverane Herbe”† says: “After Cuba, the Philippines are the smoker’s paradise. The tobacco is second only to that of the Pearl of the Antilles, and all the people smoke. Contrary to the usual Eastern custom, limitations are set upon smoking by children. The Filipinos do not allow children under ten years of age to smoke. The lady of the house lays in a stock of tobacco as regularly as an English housekeeper gets in her coal. The people make their own cigars, as smokers at home roll their own cigarettes (hence the form of Manila cheroots), and boys and girls twist their cigars as deftly as a hardened English cigarette-smoker. It is a common sight in Manila to see father

*The suggestion is met to some extent by Secretary Taft’s proposed agricultural bank.

† The Soverane Herbe. W. A. Penn, New York, 1901.

and mother sauntering along, each smoking a cigar and followed by their children, also happily puffing the divine herb. The Negritos of Luzon smoke in a curious fashion, holding the lighted end of the cigar in their mouth. Some Anglo-Indians also practice this method, by which it is claimed smoking is more enjoyable and the secretion of nicotine avoided. With a little practice all danger of burning the mouth is overcome."

THE COCOANUT PALM AND ITS DERIVATIVES.

The cocoanut palm is the most useful of all tropical growths. It enters largely into the domestic economy of all Oriental people, and its products are adapted to a great variety of purposes. The nut yields a nutritious food and the milk a healthful beverage. From the sap a spirituous liquor is distilled. The fiber answers many purposes, and the trunk is cut into lumber, whilst the leaves serve for thatch. Aside from these and other utilities, valuable commercial products are derived from the tree. The most important of the latter are copra, cocoanut oil and coir.

The cocoanut grows throughout the Archipelago, and there are extensive areas particularly well adapted to its cultivation. The site of a plantation should be well-watered, alluvial, or sedimentary, ground. Seed nuts are used, after they have sprouted, and are set in soil that has been ploughed and manured. The nuts, or shoots, should be planted in straight rows



about nine meters apart, allowing about one hundred and twenty-five trees to the *hectare*. The trees will begin to bear fruit in the seventh year, and will reach maturity in the fifteenth year. The earlier crops are gathered with extension cutters, or from ladders. When the tree has become hard, shoulders may be cut in it for climbing.

COPRA AND COCOANUT OIL.

In the chapter on Commerce mention is made of the infant trade in copra and its rapid expansion. Copra is the dried meat of the nut, from which is derived the oil. It is now extensively used in the preparation of such dietetic compounds as "vegetaline," "cocoline," and other "butters," which are free from the objections attaching to animal margarin, and have a much higher fusion point than dairy butter, a very desirable quality in the tropics. The manufacture of these vegetable compounds is extending rapidly, creating a constantly increasing demand for the raw material. One of four, or five, large factories in Marseilles had an average output of twenty-five tons a month in 1900, and is now turning out upwards of seventy thousand tons a year.

Cocoanut oil is not at present an article of export from the Philippines, but the local consumption is very large. At least one light is kept burning all night in every Filipino house in the country, and cocoanut oil is used for the purpose. It is made in

thousands of homes by a rude process which answers the requirements. Cocoanut oil is also the street luminant in out-of-the-way *barrios*. It enters largely into the culinary processes of the natives, and is used for medicinal purposes and by the women as a hair dressing. Students of the industrial economy of the Philippines have frequently urged that the oil should be exported instead of the copra. Under present conditions the larger part of the profit in the trade accrues to the manufacturer at the expense of the grower. There are several difficulties in the way of adopting the suggested reform, which would only be feasible in the case of a corporation carrying on the industry upon a fairly large scale. The copra buyers, of course, raise every obstacle to endeavors to ship oil, and are said to have contrived to influence discriminatory freight rates against it. The most important factor in the question, however, is presented by the problem of finding a market for the press-cake, which is a valuable by-product of the manufacture. This cake, which is the residue of the copra after the oil has been expressed, is used in Europe as a cattle food, and brings such good prices that the copra buyer can afford to pay the full value of the copra, on the basis of its yield of oil, with confidence that the resultant press-cake will pay incidental costs and leave a generous profit to the manufacturer. There is no demand for the press-cake in the islands.

In this, as in other Philippine industries, the process followed is crude and behind that of other Oriental countries, where machinery is employed with economical results. Taking a nut in his hands, the operator sharply strikes it upon a spearhead which is fixed in the ground, and thus removes the husk. An average man will husk one thousand nuts in a day in this manner, but twice as many, and even more, are sometimes handled by particularly dexterous workmen. Another man splits the nuts in half with a stroke of a *bolo*. The fragments are then laid in the sun for a few hours, when the flesh is easily removed. Sun drying for a day follows, after which the meat is exposed upon a bamboo griddle to the heat of a slow fire, composed of the shells and husks. After being broken into smaller pieces the product is ready to be shipped as marketable copra.

POSSIBILITIES OF THE INDUSTRY UNDER IMPROVED METHODS.

Modern plants, as operated in India and other countries, employ machinery to husk the nut, crush the shell, to remove and winnow the fiber; to rasp and macerate the meat and to compress the residue. In the Philippines no account is taken of the husks, shell, or fiber, although they are valuable by-products, the last in particular being extensively used for coir matting, ship's cables, the covering of electric cables, etc.

W. S. Lyon, of the Philippine Bureau of Agriculture, has expressed the opinion that "notwithstanding the cheapness of labor, it is only by employing a mill well equipped with decorticating, rasping, hydraulic-crushing, and steam-boiling machinery, and with facilities to convert the residue to feeding or other uses, that one may hopefully enter the field of oil manufacture in these islands in competition with copra-buyers." He goes on to show the saving in the fiber item alone under such conditions. Estimating sixteen *quintals* of spinning fiber and five *quintals* of bristle fiber from every ten thousand husks, rating the cost of manufacture at half the selling price, and adding 20 per cent. to cover freight and commission, we have at \$80 gold per ton, selling price, a balance of \$55.63 per *hectare*. Deduct \$7, the cost of fertilizers to compensate for the removal of ten thousand husks from the soil, and we have a net profit of about \$50 per *hectare*.

With the outlay of about \$2,000 in machinery and power, the output of a grove of four thousand trees could be scientifically handled and the enhanced profit might be expected to pay for the plant in one year.

Mr. Lyon thinks that the "present conditions present especially flattering attractions to cocoanut growers capable of undertaking the cultivation upon a scale of some magnitude. The present production of copra (estimated at 278,000 *piculs* in 1902) is

assurance of a supply sufficient to warrant the erection of a high-class modern plant for the manufacture of the ultimate (the 'butter') products of the nut." The prospects of such an enterprise would be increased by the certainty of a local market in the Philippines for most of the output. The average value of the best grades of copra in the Marseilles market is \$54 gold per English ton. The jobbing prices January 3, 1903, of the refined products were, for each ton of copra:

Butter fats	\$90.00
Residual soap oils	21.00
Press cake	5.20
	\$116.20

The difference represents the profit per ton, less the cost of manufacture. The profitable operation of such a plant would call for a plantation at least 300 acres in extent.

There is no agricultural enterprise afforded by the Philippines in which the returns are greater or more assured than the cultivation of the cocoanut. The process is simple and the crop is practically guaranteed. The tree is subject to comparatively few diseases or accidents, its enemies are neither numerous nor difficult to circumvent. The demand for the product is continually enlarging, and such changes as are likely to occur in the trade features of the industry will probably be in favor of the planter.

ESTIMATED EXPENSE AND PROFIT IN COCOANUT
PLANTATION.

The following estimate of outlay and profit is based upon the conditions in the district of La Laguna and Tayabas, where the nearest approach to systematic culture prevails. It may be accepted as a guide to prospective planters, although the figures for different districts vary and sometimes those for the different localities in the same district. The calculation, like all others in these chapters, is on the basis of United States currency.

The cocoanut lands of the provinces in question are of three grades, valued at about \$25, \$12.50 and \$5 per unimproved *hectare* for the first, second and third class, respectively.

Formerly it was the practice to plant trees about five thousand to the *hectare*, whereas, at present, it is customary to place three thousand five hundred at the most in that area. It is, however, more convenient to use the former units of computation.

Plantations of twenty *hectares*, or larger, are generally laid out and worked upon the tenant, or "beneficiary," system. The planter apportions the estate between five tenants, each of whom plants the trees upon the section assigned to him. The title to half the trees thus planted remains in the tenant until he has been paid for them at the rate of twenty-five cents apiece at the end of a stipulated period, generally seven years. After that time the full ownership of

the plantation is vested in the proprietor of the land. The owner of the land furnishes the seed, implements, and animals, necessary for the work; the tenant prepares the land, plants the seed and tends the grove until the trees come into bearing. In the meanwhile, the latter may grow crops in the spaces between plant-rows, using the landowner's animals without charge. With the beginning of the fruitful stage of the enterprise a new agreement is made. If the nuts are to be sold in a fresh state one-fifth of the crop goes to the tenant as remuneration for harvesting it. If copra is produced, the tenant receives one-third of the output. In both cases transportation is effected at the expense of the proprietor.

The plan of operating a plantation with hired labor is quite unknown to the industry, but, with plenty of draft animals and labor-saving farm implements, it could be operated profitably. Under such conditions one man could look after eight *hectares* and do it more efficiently than he now tends half that area.

Omitting labor, then the outlay upon twenty *hectares* of first-class land planted with five thousand trees will be as follows:

20 hectares of land at \$25	\$500
5 carabao at \$50	250
5,000 seeds at \$10 per thousand	50
Interest at 10 per cent. on investment for seven years.	560
Taxes at three-eighths of 1 per cent.	15
Purchase of 2,500 trees at 25 cents	625

Total investment\$2,000

The first crop will be harvested in the seventh year, after which the production will increase slowly, but steadily, for seven more years, when the full maturity of the plants is reached. The average yield of the eleventh year, which is fifty nuts per tree, may be taken as a fair basis for the calculation of annual income during the eight years preceding full growth. Thus, a grove of five thousand trees will afford a crop of two hundred and fifty thousand nuts. If these are sold at the current local price of \$10 per thousand, and deducting the one-fifth shares of the tenants, the proprietor will derive from his plantation an annual income of \$2,000 on an investment of an equal amount. In the fifteenth year and thereafter each tree will give six harvests a year of fifteen nuts, or an annual total of ninety, thus bringing the yearly output of the plantation up to four hundred and fifty thousand nuts, having a gross value of \$4,500.

These returns are only enjoyed from the best lands. Trees in lands of the second class will give an average of sixty nuts per annum, whilst uplands of the third grade will not yield more than half that quantity.

It is not possible to make so close a calculation upon the results of copra production, because the yield of meat per one thousand nuts varies greatly with the locality and conditions of growth and the methods employed in the manufacture. In the provinces under consideration, however, four *piculs*

(a *picul* is equivalent to $137\frac{1}{2}$ pounds) per one thousand nuts is a conservative estimate.

Upon this basis twenty *hectares* of first class land will yield one thousand eight hundred *piculs*, having a present local value of \$4 per *picul*. Deduct the tenants' one-third shares from the total receipts of \$7,200, and we have a gross income of \$4,800 for the planter.

The cost of transportation must come out of these returns before net profit can be determined. At present all copra is brought down to the coast on pack animals, and in some instances the expense of carriage amounts to as much as one-fourth the price of the manufactured article. However, this is an item that will be reduced with the extension of the system of roads and minimized shortly for the districts that may be fortunate enough to be tapped by the railroad.

AGRICULTURE.
(CONTINUED.)

VIII.

AGRICULTURE.

(CONTINUED.)

Method of Coffee Culture—The Promise of Benguet Coffee—Rice—Cacao Cultivation and its Possibilities—Detailed Statement of a Cacao Plantation—Estimate of Expenses and Income of Sixteen Hectares of Cacao—Minor Products, Indigo, Maize, Zacate, Teosinte—Bamboo and Nipa Palm—The Primitive Methods of Philippine Agriculture—The Filipino Considered as a Laborer—The Field for Americans in the Islands.

Coffee appears to have been introduced to the Archipelago by the Spanish missionaries. Its systematic cultivation was commenced in the early part of the last century. In the eighties it had attained a prominent place in the exports of the Philippines, but since 1889 the output has gradually fallen off until at present it is merely nominal. The greater part of the production was in the provinces of Batangas, Cavite, and Tayabas, whilst a considerable quantity of an inferior grade came from Mindanao. In the hoped-for revival of the industry it is more than possible that Benguet will be the center of production, both as regards quality and quantity.

The most prominent planter in Batangas was Don Jose Luz, whose influence and example gave a great impetus to the growing of the berry. We are indebted to the account of his son, Hon. Simeon Luz,

the present Governor of Batangas, for most of the following details of coffee culture in the Lipa district.

METHOD OF COFFEE CULTURE.

As a preparation to the establishment of a plantation the seed of the *madre de cacao* is sown at regular intervals. After a year the young trees have reached a sufficient height to afford the requisite shade for the coffee plants, which are set out in the intervening spaces. From time to time the protecting trees are pruned and some of them removed in order to regulate the shade. Many careless cultivators shirk this precaution with a consequent deterioration of the product. The neglect has two questionable advantages; the trouble of checking the trees is avoided and the growth of weeds in the dense shade is less than it otherwise would be.

Six years usually elapse before the profits from a plantation offset the cost of caring for it for one year, but Mr. Luz expresses the opinion that "by adopting modern methods the time of fruition may be advanced one or two years." According to the methods in vogue, a plantation of average fertility will, with good care, yield from twelve to twenty *piculs* per *hectare*. The cost of laying out one *hectare* in *madre de cacao* and coffee, including material and labor, will amount to about \$30.

The plant gives three crops—between August and September, in October, and in November, but per-

haps this should be considered as one continuous harvest. The berry is picked by hand, but, as the highest branches of the tree cannot be reached, the harvester draws them down with a hook and so holds them with his foot whilst gathering the fruit. Of course this method, unless followed with the utmost care, works injury to the plantation. Unfortunately the coffee-picker receives his remuneration in the form of one-fifth of the produce he handles, and the inducement is to secure as great a weight of berries as possible without regard to the damage inflicted in the process.

The usual method of drying is to pile the berries for twenty-four hours whilst they ferment, and then to spread them in a cement enclosure, called a *bilaran*, until they have become hard enough to resist the action of the pestle which is used in cleaning. This is one of the features of the industry that need reforming. It is both tedious and wasteful. The berries sometimes lie for thirty to fifty days before they become hard enough and are apt to rot in the meanwhile.

The cost of airing, sifting, and sorting one *picul* of coffee is about fifty cents. The cost of weeding and caring for a plantation varies with the degree of culture devoted to it. A fair average is perhaps \$5 a year per *hectare*. The crop should run from twelve to twenty *piculs* of berries per *hectare*, but, as a matter of fact, the actual figures are more generally

from six to ten. This is due to shiftlessness, as exhibited in failure to reduce the shade, inefficient weeding, etc.

The prices secured in the Manila market for Batangas coffee in 1899 ranged from \$12.50 to \$17.50 per *picul*.

It is significant of the unscientific and haphazard methods that characterize all the industries of the Philippines that the worms which destroyed the coffee trees in 1889 had been known to the planters since the inception of coffee culture and had done more or less damage every year. To quote Mr. Luz, "this damage was so small, however, that no one bothered about seeking a remedy for an evil that he did not believe could cause a complete destruction of all coffee plantations. But in 1889, to the great surprise and fear of all, it was observed that all the plantations of the province were attacked. That year saw the total loss of the crop and the death of almost all the coffee plants throughout the territory which Lipa comprises."

After this achievement the worms disappeared and two years later new branches sprang from the denuded trunks. The budding hopes of the planters were quickly shattered, however, for simultaneously with the revivification of their trees the blight appeared upon the leaves. Thoroughly discouraged and despairing of a revival of the industry, the owners of coffee lands put them under the plough and planted

sugar, rice, and corn. Hardly one *hectare* in a thousand of the former plantations remains in coffee.

THE PROMISE OF BENGUET COFFEE.

The natural conditions in Benguet are admirably adapted to the successful growth of the plant; the product is of an exceptional quality, comparing favorably with Mocha and Java in the opinion of experts; the blight has never appeared in the province; the demand for the Benguet berry, at highly profitable figures, is greatly in excess of the supply, and is likely to remain so for many years; and the climate is a delightful one for Europeans and Americans.

In the words of Governor Pack, "the only obstacle in the way of making coffee cultivation a most profitable industry is the difficulty of obtaining suitable labor. The question of labor will depend entirely upon the individual. The cost of labor for *hacienda*, or ranch, purposes will average from five to ten cents gold a day, depending upon the kind of labor required and the age and sex of the laborer. As these coffee plantations now in the province have been planted and cared for mostly by the women, and at odd moments when they were not otherwise occupied, it is impossible to estimate the cost of making or caring for a coffee plantation, but it is usually estimated by growers who are so far civilized as to figure on profit and loss, that the coffee trees after an average of five years should net the owner twenty-

five cents gold each year. These trees may be planted six feet apart. This coffee sells in the market at Benguet to-day at from \$6 to \$7.50 gold a *cavan** which should weigh about sixty-seven pounds."

It would appear that, with coffee at \$12 per *picul* in Manila, the grower under present methods would make a profit of about sixteen per cent. on the capital invested. Allowance must, however, be made for bad years and twenty per cent. is probably a fair deduction to cover that contingency. But it is generally conceded that under an improved system of production the crop might be augmented at least one-fifth without material increase of outlay. The price of labor does not affect the calculation greatly, since a large part of the work is done on the share plan. In any case the recent enhancement in wages should be more than offset by the reduction in transportation cost which will follow the opening of the railroad. The Insular Bureau of Agriculture is conducting experiments with a special kind of coffee in Lipa, and it is confidently believed that the result will be to re-instate the industry which was formerly the chief source of wealth of this once prosperous district. Planters are also looking to this Bureau for the discovery of preventive measures against the inroads of worms and blight. Meanwhile Benguet seems to offer the likeliest field for the production of the berry.

* This would give approximately from \$12 to \$15 a *picul* of 137½ pounds.

Coffee was introduced to the Province of Benguet in 1875, and, after experiments, was found to thrive on the plateaus at an altitude of four or five thousand feet. In 1881 the Spanish governor ordered all the natives of the province to engage in the cultivation of the plant. This met with the active opposition of the Igorots, who destroyed the plantations in Daklan and undid the work of years. It happened about this time that the natives of Kabayan were under an Igorot chief of enlightened ideas and great influence over his people. This young chief visited Manila and other places in an investigation of the coffee industry, and, reaching the conclusion that it would afford a profitable field for the labor of his subjects, induced them to plant extensively. In a few years this tribe excited the envy of its neighbors by its comparative wealth, derived from the new enterprise. The Igorots of Daklan have endeavored to retrieve their former opportunity by planting coffee trees, and in a few years the district should produce large crops.

Governor W. F. Pack, of Benguet, estimates the yield of a plant six years old at "three pounds of good coffee" per year, but this is surely an over-sanguine expectation. In Peru, where coffee is grown at the same elevation as at Benguet and under somewhat similar climatic conditions, the average annual crop is one pound per tree, whilst in the Philippines ten ounces is a high average. If we assume that the Governor's figures were intended to refer to the green

berry and allow for the fifty per cent. difference in weight between it and the dried bean, we have an estimate too high to accept without explanation.

The product of the Benguet highlands is of excellent quality and has always found a ready market. The entire output has heretofore been taken by the *Tabacalera* Company and shipped to Spain, where it always has commanded fancy prices. These have doubtless in a measure been due to the limited supply and will probably decline somewhat with increased production. The Insular Government is doing all in its power to foster and encourage the industry amongst the natives of the province.

The price paid by the *Tabacalera* Company for Benguet coffee on the plantation, is equivalent to \$12 to \$15 per *picul*, but \$1 per *picul* should be added for cost of carriage to Manila, when we have figures which compare well with the high quotations for Batangas coffee in Manila during 1899. It is almost certain that a company, or individual, operating upon a fairly large scale and selling in the open market would secure much higher values for its product, which would presumably be of a superior grade. These greater returns, and the practice of certain economies possible in the production, would permit of the payment of higher wages, and since Benguet will be connected by rail with Manila and the intervening provinces before these lines are in print, the solution of the labor problem should not be difficult to find in the importation of field-hands.

Rice, the staple article of food of the natives of the Philippines, as it is of most Oriental people, is grown more or less in every province of the Archipelago. It was the earliest agricultural industry of the Islands, and rice culture is to-day the occupation in which the Filipino finds the greatest pleasure and that in which he acquits himself most creditably.

For many years rice was an important article of export, but since 1876 it has been imported in large quantities, and particularly so in the period of American occupation. The large increase in purchases of foreign rice during recent years has been due mainly to the rinderpest, which carried off thousands of *carabao*, upon which the cultivators depended for the preparation of their fields. In many provinces—probably in most—the abandonment of rice has resulted in positive gain, for the natives have generally turned their ground to better account by putting it into higher-priced produce.

There are several species of the grain raised in the Philippines, but they come under two general heads, namely, *macan*, or lowland rice, and *paga*, or upland rice. The former is a much finer quality in which the white grain predominates, whilst *paga* always contains a large proportion of red grain. *Macan* returns on an average eighty *cavans* in the crop for one of seed, and will sometimes run as high as one hundred to one, but *paga* seed seldom produces more than forty grains. On the other hand, more than one crop is

rarely harvested from the lowlands, whilst upland fields generally give three. The seed beds for lowland rice are thoroughly mashed with the plough under four or five inches of water and thickly sown broadcast. When the shoots have reached a height of from ten to fifteen inches they are pulled up by the roots and transplanted.

The paddy-field is treated in the same manner as the seed bed, and the soil is worked up with a harrow under water until it forms a muddy mass. In order to accomplish this result artificial irrigation must sometimes be resorted to. The land is kept flooded until inflorescence develops; it is then allowed to dry.

The upland field is prepared by several ploughings and harrowings during the early rains. The seed is then sown directly upon it. In some localities sowing is effected by dropping three or four grains into each of a number of small holes which are made with a bamboo instrument. About one *picul* of unhulled rice is needed to sow a *hectare* of land of either character.

Lowland rice is sown in May at the commencement of the rainy season, and harvested about four months later. It is cut with sickles, bundled, and allowed to lie in the field until dry.

The process of separating the grain from the straw is carried out in various ways. Some small cultivators use flails; others resort to their feet. The grain

is then pounded in a wooden mortar and finally sifted through shallow baskets. There are, however, a number of threshing mills in Luzon which charge from twelve to fourteen cents per cavan for cleaning rice. The principal rice producing sections in the Archipelago are Pangasinan, Nueva Ecija, Pampanga, Tarlac (northern portion), Zambales (southern part), Bulacan, Cavite, La Laguna, Batangas, Camarines Sur (the chief district of southern Luzon), the Visayan Islands, Capiz (Island of Panay), and Negros. Pangasinan contains the best rice lands in the north. The *macan* of this province returns eighty *cavans* of grain for one of seed; in the uplands the return is from forty to sixty grains.

The finest rice farm in the Archipelago is at Imus, famous as the headquarters of the insurgents in Cavite during 1896. It contains eighteen thousand *hectares*, of which upwards of thirteen thousand are under rice cultivation. One third of this area is choice land that yields one hundred *cavans* of rice to one of seed; another third yields seventy-five, and the remainder fifty to one. The balance of the estate is upland, which could be made to produce in the ratio of perhaps forty to one. In the same province there are notable plantations at San Francisco de Malabon and at Santa Cruz de Malabon.

In some provinces the land is prepared under contract at the rate of \$1.50 per *hectare*, and for harvesting \$3 and one *cavan* of seed per *hectare* are allowed.

Or, the cutting may be contracted for at the rate of from 25 cents to 37½ cents per thousand bundles, of which the former yield two, and the latter, four *chupas*.

The cost and returns of rice culture vary greatly with differing conditions. The Cavite farms to which reference has been made net about thirty per cent. per annum on the capital engaged. They are, however, worked under exceptionally favorable conditions. Nevertheless, it is quite probable that with ample capital, modern machinery, and railroad facilities, such as will soon be available, a large operation might produce as good, or even better, results.

CACAO CULTIVATION AND ITS POSSIBILITIES.

Cacao is found widespread throughout the Archipelago but only in a few localities is it raised at all extensively. The intelligent cultivation of the plant is a highly profitable occupation where the yield is of excellent quality and the demand for it at present considerably in excess of the supply. All the chocolate produced from the Philippine cacao seed is consumed in the islands and falls short of the domestic requirements. Should the industry expand, as it ought to, until there is a surplus for exportation, the product will find a ready market in the United States and elsewhere, for it is admitted by manufacturers to be first class, if not quite equal to the very best.

Many sections of the Archipelago are perfectly adapted to the cultivation of the plant, and with im-

proved methods the present large profits and superior quality of the product may both be enhanced.

The prime essential to the successful growth of the cacao plant is a suitable climate; physical environment is of next importance, and character of soil the least consideration. Cacao thrives in the atmosphere of a Turkish bath, and it should be planted in small valleys free from draught and sheltered from the prevailing wind by high hills or mountains. Plantations set in forest clearings enjoy the best possible conditions, it being understood, of course, that the heavy forest remains standing around the field. The land is cleared of everything but necessary shade trees, and worked to as great a depth as possible. Drainage ditches are dug before planting takes place. It is the general custom to set the fruiting banana for temporary shelter, but in districts where *abaca* will grow it may be substituted with profit. The temporary shade is maintained until the fourth or fifth year, when it is grubbed out, the stalks and roots being left upon the ground, to which they furnish a useful fertilizer, rich in nitrogen. There are two varieties of cacao in general cultivation in the Archipelago—the *criollo* and the *forastero*. The former has the better flavor, is less bitter, and is more easily cured; qualities which combine to give it a higher commercial value. On the other hand, *forastero* has the advantage in point of yield, vigor, freedom from disease, and compatibility to environment. In gen-

eral, then, the preference should be given to the latter, but in certain districts of Mindanao, where conditions perfectly favorable to its cultivation prevail, *criollo* may be raised with greater profit.

Planting is done "at stake," or from the nursery. The former method, which consists in depositing seed directly in the field, is very hazardous on account of the presence of numerous predatory insects and vermin. A careful planter will always resort to seedlings, which may be kept under close care and control until ready for transplanting. The seeds are planted singly in small pots, or bamboo tubes, the receptacles being set in a free, light soil. The shoots are carefully watered and shaded for from three to six months, when they will be ready for setting out.

The cacao plant grows to a height of from ten to twelve feet, and bears its crop of heavy pods directly from the trunk and main branches. Its five-inch fruit depends from stems none too strong and is easily torn off by a high wind. The wood of the tree is of a very soft and spongy character, and offers only the slightest resistance to borers, so that it is necessary to be extremely careful to avoid injury to the bark. This makes pruning a delicate operation. The most abundant crop is generally secured at the commencement of the dry season, and the fruit continues to ripen during two months. The pods should be gathered by hand, or with the aid of extension cutters. Never should a laborer be allowed to climb a

tree. The fruit is thrown upon the ground in heaps and opened within twenty-four hours. Two jars of water are provided for the cleaners, who sort and grade the seeds as they are removed from the pulp. Large, ripe, and unimpaired seeds go into one jar; small, imperfect and immature seeds into the other. Thus they are allowed to stand for a day, after which they are washed in fresh water, dried in the sun for two or three days, and they are ready for the manufacturer. Simple as the process is, it results in an excellent quality of product which finds a ready market at unusually high prices. Under these circumstances it is doubtful whether the attempt to improve the grade by fermentation with its attendant risk is advisable.

Few crops make so little drain upon the soil as cacao does. Trees commonly bear continuously for twenty years and more without the aid of any fertilizer, but the use of it would, no doubt, be advantageous both as to quantity and quality of yield.

DETAILED STATEMENT OF A CACAO PLANTATION.

The following estimate of the expenses and profit involved in cacao cultivation, carefully compiled by Mr. W. S. Lyon, of the Insular Bureau of Agriculture, might, perhaps, need some revision to conform to the present conditions of the labor market and other economic changes of the past two or three years.

It is, however, substantially correct, and may be accepted as a reliable guide by prospective planters.

The size of farm, sixteen *hectares*, is based upon the amount of land prescribed by Act of Congress as the limit of a single public land entry. The cost of procuring such a tract cannot be determined, but it would undoubtedly be low. The price of the product is calculated at forty-eight cents per kilo, which is the current figure for the best grade of cacao in the open market. The yield per tree is fixed at two *catties*, a conservative estimate for a tree with little or no cultivation. The prices for unskilled labor are given at one-fourth advance over the wages of farm hands in the Visayas, but probably a further increase of twenty-five per cent. would be necessary in order to arrive at the present cost of labor in many localities. No allowance is made for management, on the assumption that the owner would supervise the property.

EXPENSES AND INCOME.

Charges to capital account are given for the second, third and fourth years, but no current expenses are given, for the proposition contemplates sufficient receipts from side crops to defray the expenses of the operation until the cacao trees begin to bear.

ESTIMATE OF EXPENSES AND INCOME OF SIXTEEN
HECTARES OF CACAO.

FIRST YEAR.

Capital account:

Clearing average brush and timber land, at \$15 per <i>hectare</i>	\$340.00
Four <i>carabao</i> , plows, harrows, cultivators, carts, etc.	550.00
Breaking and preparing land, at \$5 per <i>hectare</i>	80.00
Opening main drainage canals, at \$6 per <i>hectare</i>	96.00
Tool house and store-room	200.00
Purchase and planting 10,000 <i>abaca</i> shoots, at 2 cents each	200.00
Seed purchase, rearing, and planting 12,000 cacao trees, at 3 cents each	360.00
Contingent and incidental	174.00
	\$2,000.00

SECOND YEAR.

Interest on investment	\$200.00
Depreciation on tools, buildings, and ani- mals (20 per cent. of cost)	150.00
	\$350.00

THIRD YEAR.

Interest on investment	\$200.00
Depreciation as above	150.00
	\$350.00

FOURTH YEAR.

Interest on investment	\$200.00
Depreciation as above	150.00
Building of drying house and sweat boxes, capacity 20,000 kilos	450.00
	\$800.00
 Total capital invested	 \$3,500.00

FIFTH YEAR.

Income account:

From 11,680 cacao trees, 300 grams cacao each, 3,500 kilos at 48 cents	\$1,680.00
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Expense account:

Fixed interest and depreciation charges on investment of \$3,500	\$350.00
Taxes 1½ per cent. on a one-third valuation basis of \$250 per hectare	60.00
Cultivating, pruning, etc., at \$5.50 per hectare	88.00
Fertilizing, at \$6 per <i>hectare</i>	96.00
Harvesting, curing, packing, 3,500 kilos cacao, at 10 cents per kilo	350.00
Contingent	86.00
	\$1,030.00
Credit balance	\$650.00

SIXTH YEAR.

Income account:

From 11,680 cacao trees, at 500 grams cacao each, equals 5,840 kilos at 48 cents	\$2,803.20
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Expense account:

Fixed interest and depreciation charges as above	\$350.00
Taxes as above	60.00
Cultivating, etc., as above	88.00
Fertilizing, at \$8 per <i>hectare</i>	128.00
Harvesting, etc., 5,840 kilos cacao, at 10 cents per kilo	584.00
Contingent	93.20
	\$1,303.20
Credit balance	\$1,500.00

SEVENTH YEAR.

Income account:

From 11,680 cacao trees, at 750 grams cacao each, equals 8,760 kilos, at 48 cents	\$4,204.80
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Expense account:

Fixed interest charges as above	\$350.00
Taxes as above	60.00
Cultivating, etc., as above	88.00
Fertilizing, at \$10 per <i>hectare</i>	160.00
Harvest, etc., of 8,760 kilos, at 10 cents per kilo	876.00
Contingent	170.80
	\$1,704.80

Credit balance	\$2,500.00
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EIGHTH YEAR.

Income account:

From 11,680 trees, at 1 kilo each, at 48 cents	\$5,606.00
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Expense account:

Fixed interest charges as above	\$350.00
Taxes as above	60.00
Cultivation, etc., as above	88.00
Fertilizing, at \$12.50 per <i>hectare</i>	200.00
Harvest, etc., 11,680 kilos, at 10 cents per kilo	1,168.00
Contingent	240.00
	\$2,106.00

Credit balance	\$3,500.00
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NINTH YEAR.

Income account:

From 11,680 trees, at 2 <i>catties</i> (1.25 kilo), equals 14,600 kilos each, at 48 cents	\$7,008.00
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Expense account:

Fixed interest and depreciation charges as above	\$350.00
Taxes, at 1½ per cent. on a one-third valuation of \$500 per <i>hectare</i>	120.00
Cultivation, etc., as above	88.00
Fertilizing, at \$15 per <i>hectare</i>	240.00
Harvesting, etc., 14,600 kilos, at 10 cents per kilo	1,460.00
Contingent	250.00
	\$2,508.00
Credit balance	\$4,500.00

In the tenth year there should be no increase in taxes, or fertilizers, and a slight increase in yield, sufficient to bring the net profits of the estate to the approximate amount of \$5,000. This would equal a dividend of rather more than \$312 per *hectare*, or about \$126 per acre.

These tables further show original capitalization account cost of nearly \$90 per acre, and from the ninth year annual operating expenses of somewhat more than \$60 per acre. It should be stated, however, that the operating expenses are based upon a systematic and scientific management of the estate, while the returns, or income, are based upon the revenue from trees that are at the disadvantage of being without any culture whatever, and whilst it is improbable that either the original cost per acre, or the cost of operation, can be materially reduced, it is tolerably certain that the yield may be increased

considerably beyond two *catties* per tree. In the Cameroons, and in French Congo, trees are stated on indisputable authority to yield in excess of four pounds, or over three *catties*. In the Carolines the trees are said to give five and six pounds, and it is claimed that single plants in Mindanao have borne as much as ten pounds of seed.

As Mr. Lyon remarks, "the difference between good returns and enormous profits arising from cacao growing in the Philippines will be determined by the amount of knowledge, experience, and energy that the planter is capable of bringing to bear upon the culture in question."

Whilst the foregoing estimate has taken no account of manager's salary, it would be indispensable to success that an individual or corporation investing money in the industry without knowledge of its details should secure the most experienced management possible without sparing expense. The cultivation of cacao is a very hazardous enterprise, and although recent investigations have revealed much that will facilitate the culture in the future and reduce the dangers, it would be no more than prudent to calculate upon, say, one bad year in five, or, in other words, to discount the calculated profits twenty per cent.

The enemies of cacao are numerous, and include worms, bugs, monkeys, and parrots. Drought may destroy young plants, or at least prevent a crop, and a hurricane, when the trees are laden, will strip

them of fruit. For these reasons some persons recommend cacao only as a side crop and not as a dependence, and it would be a sheer gamble for any one to put all his capital into a cacao plantation. The prospective returns, however, are so extremely large in this industry and the eventual profits so certain, that it offers a splendid investment for capital supported by an ample reserve. For instance, \$5,000 put into cacao, with another \$5,000 to reinforce it if necessary, would insure the success of the venture. If \$750, or \$1,500 local currency, were paid to a good manager there would be a small deficit during the first three or four years perhaps, although the presence of such a man might be expected to enhance the receipts from the shade *abaca*; but in any case such an outlay would be in the nature of ultimate economy.

MINOR PRODUCTS, INDIGO, MAIZE, ZACATE, TEOSINTE.

Indigo was at one time exported in considerable quantities (in 1892 to the value of over \$150,000) from the Ilocos provinces and is still produced in that section, but now only for the home consumption. The loss of the market for indigo is attributed to the extended use of dyes derived from coal tar, that is to say aniline dyes, and to the gross adulterations to which the Philippine product was subjected by the Chinese jobbers, who, by-the-way, have created a bad name for Philippine gutta percha in the same manner. Twenty-five years ago the product of Ilocos

Sur fetched as much as 120 *pesos* per *quintal* in the open market; to-day 30 *pesos* is a fair price for it. This great falling off is due mainly to the manipulation referred to above. There is still an extensive market for vegetable indigo, and it is believed that with proper cultivation and honest treatment the Philippine product would command very much higher figures. Indigo can be subjected to a high grade of cultivation at a cost of \$40 to \$50 per *hectare* of land which, under such conditions, should yield at least four *quintals* of good quality dye stuff. This at, say \$25 per *quintal*, would yield a fair profit.

Indian corn is quite generally cultivated through the Archipelago, and in a few districts is the staple food of the natives, but they invariably prefer rice when they can get it. Maize is chiefly used as a cattle food, and for this purpose the entire plant—stalk, leaves and grain—is utilized. In good land maize seed will yield two-hundred fold and give three crops in a year.

Zacate, which is forage grass of several varieties, is profitably grown in the vicinity of likely markets. Farmers are enabled to gather five, and even six, crops in the year, for which, especially in Manila, good prices are obtained. The grass is not cured, but made up into small bundles and sold for consumption in the green state.

Teosinte is a very valuable annual grass which has recently been introduced to the Philippines, where its

adaptability has been satisfactorily demonstrated. It grows as high as twelve feet and from sixty to seventy stems are produced from a single seed. In the southern portion of the United States it has been found to yield crops of from twenty to fifty tons per acre.

BAMBOO AND NIPA PALM.

Several species of bamboo grow luxuriantly throughout the Archipelago. This plant is an important factor in the domestic economy of all Oriental people. The Filipinos put it to many useful purposes, the principal being the construction of houses, the frameworks of which are as a rule made of this material. The entire edifice is strongly constructed of vegetable products and without the employment of a nail. The bamboos are firmly bound together with *bejuco*, or rattan, and the roof is formed of a *cogon* or *nipa* thatch. The floors are usually of bamboo and the same material is used for doors, window, shutters, and the rest.

Bamboo is converted to the greatest number and variety of purposes; indeed, there appears to be no species of domestic utility or industrial occupation, in which it does not play an important part.

The variety called *Cauayang totoó* sometimes attains a height of more than twelve meters and a diameter of more than twenty centimeters.

Nipa, or *sasa*, is a very useful palm of fern-like appearance, that grows in marshy localities. It reaches

a height of four meters and throws off clusters of long leaves which are used, wherever they are obtainable, for the roofs of buildings. From the sap, *nipa* wine, or *vino*, is distilled, and large quantities of it are consumed by the natives as a beverage. Extensive groves of *nipa* are cultivated for the purpose of securing the liquor, for which there is an unlimited demand.

THE PRIMITIVE METHODS OF PHILIPPINE AGRICULTURE.

In general, the methods of agriculture followed in the Philippine Islands are antiquated, and often haphazard. The implements used are of the rudest description, and no more than a moderate degree of energy and intelligence is brought to bear upon the work. Perhaps the Filipino obtains better comparative results from his paddy-field than from any other branch of agricultural industry, but even in that, his favorite and oldest occupation, he falls far short of the maximum possibilities. It may be said of all the agricultural pursuits of the islands that with modern methods and appliances much greater areas could be cultivated with improvement in the grade of crops at no more expenditure of labor than is now applied to restricted operations.

The ancient wooden plough that was introduced from China centuries ago is still in general, in fact almost universal, use. It is drawn by a leisurely *carabao*, and does little more than scratch the ground.

A wooden harrow, also attached to the inevitable *carabao*, may supplement the superficial action of the plough. The subsequent cultivation of the growing crop is very meagre and often hardly enough to insure a harvest. Fortunately Nature in these islands needs little wooing to bestow her favors bounteously.

Since the American occupation, attempts have been made to induce the native farmers to adopt the use of modern implements and machinery, but up to the present the result has not been encouraging. Of course the difficulty lies in breaking away from old-established custom and is a perfectly natural one. Most modern field machinery is made to be drawn by horses. The native cultivator is apt to think that anything which is beyond the capacity of his ponderous *carabao* must need steam for a motive power. The pony—there are no horses—of the Archipelago is a husky little beast that should make an excellent draft animal, and, if the demand for it in that capacity arose, no doubt it would easily be met. A place must always be found for the *carabao* in the agricultural economy of an Oriental country, but it would be well if the Filipino farmer could be persuaded that the useful quadruped is not all in all.

The *Guia Oficial de Filipinas* gives a true and concise description of this remarkable animal. “The *carabao*, or water buffalo, is the most notable quadruped found by the Spaniards when they came to occupy these islands. There are few animals which

are as ugly, and there are also few which are more useful in agricultural labors, and which can better resist the enervating climate of the Philippines. Its color is black or brown, the hair is very scarce, the horns large, arched, and rough, and the head is comparatively small. Its strength is enormous. It easily swims the wildest rivers and can haul very heavy loads, although its progress is slow and its movements awkward. It likes humidity and to roll in the mud. The hide and horns of the *carabao* are of great commercial value. The *carabao* begins to work after it is five or six years old. It lives to about thirty years."

THE FILIPINO CONSIDERED AS A LABORER.

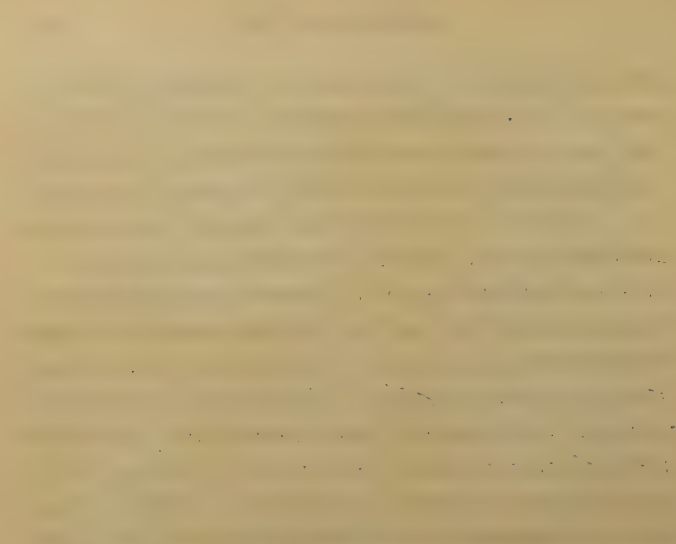
In considering the Filipino as an agriculturist we are prone to judge him by American standards which is altogether unfair. As a matter of fact he does more work than a casual observer is likely to suspect. Like the *ryot* of India, the Filipino is in his field at early dawn and puts in three or four hours before the heat becomes intense. When the shadows begin to lengthen with the decline of day he returns to his crops and toils for three or four other hours. When one considers the heat and humidity of the Philippine climate it must be admitted that six or eight hours a day is a considerable tax on a rice-fed man of indifferent physique. At any rate, it compares creditably with the practice of the peasantry of India and China, who are not subject to a similarly

enervating climate. In fact, there would not be room to cavil at the daily effort of the Filipino if it were sustained for six days a week throughout the year, but, as in most Roman Catholic countries, *fiestas* and holy days heavily discount the work days of a year.

The impression that the Filipino has no backbone should have been removed by the agricultural achievements of recent years in the face of a succession of heart-breaking calamities. The Insular Government did all that was possible to mitigate conditions, but the brunt of the struggle had necessarily to be borne by the peasant. When one considers that in 1902 nearly half the *carabao*, upon which the farmers depend, died, it is really difficult to understand how the crops of the succeeding year were produced. It is quite probable that under similar circumstances the Hindu *ryot* would have lain down in despair and surrendered his country to famine for a succession of years.

The wholesale condemnation of the Filipino day laborer is equally unjust. Under the superintendence of those who understand him he renders good service, and American contractors and Government officials who have had extensive opportunities for observation, express themselves as well satisfied with the native laborer. The average Filipino earns his wage, but it is too much to expect him to rival the American day laborer.

The *sistema inquilino*, in its several forms which



THRESHING RICE.

Where threshing mills are not within convenient distance the grain is trampled out by carabao or ponies. This picture was taken at the Government Rice Farm, Murcia, a pueblo of Negros Occidental.



are variously termed "tenant," "share," or "beneficiary" system, may be an outgrowth of the early system of *encomiendas*. It prevails in one form or another in almost all the agricultural industries, and the fact of its long continuance under the Spaniards, who knew the natives perfectly, would indicate that it is best adapted to the labor conditions of the Archipelago. It has serious drawbacks which, however, it may be possible to minimize without radical change. As a question of public policy the *sistima inquilino*, which encourages the attachment of the peasant to the soil, is more desirable than agricultural day labor, which tends to create a shifting population.

THE FIELD FOR AMERICANS IN THE ISLANDS.

There has been no intention in the foregoing account of Philippine agricultural opportunities to create the impression that the country is an El Dorado, offering wealth for the asking without risk or effort. It is true, however, that few portions of the world have such extensive undeveloped resources as the Philippine Archipelago, and perhaps none affords a more promising field for the investment of capital in moderate sums. In the countries of South America and Asia a large outlay is generally necessary to the success of industrial operations, and the question is often complicated by uncertain political conditions and unstable laws. In the Philippines there are innumer-

able channels in which ten or twenty thousand dollars may be safely invested with large profits. Most of the openings in question demand skilled direction. This may be readily hired, or the needful experience may be acquired in the majority of cases without great difficulty by the investor during a preliminary residence. There are in the islands many planters whose properties could be doubled and trebled in value by the introduction of modern methods and machinery, and amongst these, profitable investments on a partnership basis should not be difficult to find.

It cannot be too emphatically stated that there is no place in the Philippines for the man without capital, unless he has some useful trade for the exercise of which there is an unquestionable scope. In either case the prospective colonist should have a definite idea as to the future direction of his efforts before leaving America. In this connection it may be well to state that the Bureau of Insular Affairs, Washington, D. C., has published a mass of useful information on the subject which is available to the public. Furthermore, Colonel Edwards and his subordinates are ever ready to afford every assistance possible to enquirers.

There can be no doubt that the islands afford excellent fields for corporate enterprise upon a large scale. There are several branches of mechanical, mining, and agricultural industry that are well worth investigation by some of our large concerns. The

Insular Government is constantly engaged in extensive public works which involve profitable contracts. American firms should not be deterred by the presence of established foreign houses and their representatives. The Philippines are in a process of transformation. New conditions and fresh opportunities are constantly arising. Peace and order prevail, and a rapid recovery from the adverse circumstances of recent years may be expected.

There is every indication that the recent visit of Secretary Taft and the Congressmen who accompanied him to the islands, will bear immediate fruit in legislation designed to expedite agricultural and mineral development. Duties will be removed from Philippine imports to the United States. The restrictions that have militated against the investment of capital by individuals and corporations will be abated. What President Roosevelt in a recent public speech characterized as "the unfortunate measures which have seriously, in some respects vitally, hampered the development of the Philippine Islands" will undoubtedly be repealed. With the expected action of Congress and the inception of the railroad system the islands should enter, in 1906, upon an era of great prosperity.

PUBLIC LANDS, TIMBER,
MINERALS, ETC.

IX.

PUBLIC LANDS, TIMBER, MINERALS, ETC.

Area Under Cultivation—Forest Lands of the Archipelago—Some Varieties of Commercial Timber—Official and Private Tests of Philippine Timber—Scientific Survey by the Insular Forestry Bureau—Wasteful Methods of Native Lumbering—Cost of Lumber Operation Under the Present System—Possibilities of the Lumber Industry—Forestry Regulations—Gutta Percha—The Future of the Gutta Percha Trade—Rubber May be a Latent Source of Wealth—Cattle-Raising an Inviting Field for Capital—Luzon Has the Finest Grass Country in the World—Ready Markets for Philippine Cattle—Mineral Wealth—Gold has Been Mined for Centuries—Iron and Coal Exist in Abundance.

Pending the completion of the Government survey of the Archipelago, figures applying to the larger areas must necessarily be based upon estimates, which, however, have generally been made carefully and doubtless are approximately correct. The Spaniards had no exact knowledge of the area of the islands, nor even of their number. The Schurman Commission in an endeavor to ascertain the extent of the public domain had recourse to Spanish documents and "general information gathered from various sources, particularly from natives acquainted with the provinces." The conclusion arrived at was that the public lands equaled half the area of the Archipelago.

The Taft Commission, after more extensive research, reported (1900) as follows: "The total amount of land in the Philippine Islands is approximately 29,694,500 *hectares*, or 73,345,415 acres. Of this amount it is estimated that about 2,000,000 *hectares*, or about 4,940,000 acres, are owned by individuals, leaving in public lands 27,694,500 *hectares*, or 68,405,415 acres. The land has not been surveyed, and this is mere estimate. Of the public lands there is about twice or three times as much forest land as there is waste land."

The Chief of the Bureau of Public Lands in his report (1903) states: "Assuming the correctness of my estimates of 73,000,000 acres for the total area of the islands, that would leave 61,000,000 acres of land belonging to the public domain.

"The Chief of the Bureau of Public Lands estimates the forest lands on the public domain at about 40,000,000 acres. This would leave an area of 21,000,000 acres of land not forested, the most of which is agricultural in character and which will be subject to disposal under the law permitting leasing, selling and homesteading."

The latest estimates are those of the Census, calculated by Mr. George R. Putnam, of the United States Coast and Geodetic Survey. These give the total area at 73,615,374, and the public domain at 66,628,118.

Of the total area of the Archipelago only about 5,000,000 acres, or 9.5 per cent., of the whole is arable land, distributed very irregularly through the provinces. La Laguna has the largest proportion with 53.1 per cent.; Pampanga and Sorsogon each have in excess of 45 per cent; Ilocos Sur, Batangas, Iloilo, Bulacan, La Union, Cebu, Cavite, Tarlac, Albay, Capiz and Negros Occidental follow in the order named with agricultural lands aggregating from 21 to 38 per cent. of their total extent. In no other province is the proportion as great as 20 per cent., and in several, including Lepanto-Bontoc and Benguet of Luzon, it is less than 1 per cent.

Of the total area of agricultural land 45.9 is under cultivation. In the matter of ratio of cultivated to total farm land the provinces and *comandancias* do not preserve the above order by any means. Ilocos Sur is first with 84.2 per cent. of its available soil in tilth. Jolo, which in the former classification is last of forty-eight territorial divisions with less than one-tenth of one per cent. of its land arable, is second in the percentage of it under cultivation; Antique, Masbate, Albay, Ilocos Norte, La Union, Pangasinan, Rizal, Bulacan, Zamboanga, Manila City, Nueva Vizcaya, Sorsogon and Pampanga follow, all with more than 60 per cent.

All Oriental people are gregarious as a result of temperament and the exigencies of life in the East. In the Philippines this tendency to congregate has

been encouraged from the earliest times by the need of mutual protection against such common enemies as the aborigines, and other wild tribes, the Moro pirates, and ladrones. Consequently we find the inhabitants everywhere settled in small communities with no inclination to extend beyond the limits of actual necessity. Generally the holdings are very small. Nearly one-half of them are less than one *hectare* in size, whilst twenty per cent. are less than one acre. One of these little patches which would hardly support a cow in the United States will in the Philippines, with its prolific soil, contribute the main subsistence of a family. They will live upon it, and from it derive three or four different crops in the course of the year.

The average size of all farms in the Archipelago, including the small holdings referred to above, is only 8.57 acres, whilst in the United States it is according to the last census 146.6, a ratio of seventeen to one.

There are upwards of 800,000 persons engaged more or less extensively in agriculture in the islands. Of this number 99.8 are full-blooded Filipinos of the Christian tribes. Of the remainder 778 are "whites," that is, Americans and Europeans; 308 are half-castes of Spanish or Chinese origin, and 959 are pure Chinese. By far the largest proportion of farmers own the land they cultivate; some pay rent in cash and others in kind or with labor. There

has always been a great deal of uncertainty about titles in the Philippines, but the difficulties on this score have been comparatively few owing to the great amount of surplus land. In 1894 the Spanish Minister for the Colonies reported to the Queen of Spain that there were about 200,000 squatters on the public lands subject to eviction by the State, but it is believed by officials of the Insular Government that at present there are at least double that number.

FOREST LANDS OF THE ARCHIPELAGO.

Captain George P. Ahern, U. S. A., reported (1902) that "in the total of forty odd million acres of woodland we find at the very least twenty million acres of virgin forest. We find virgin forests in the provinces of Cagayan, Isabela, Nueva Vizcaya, and in that part of Tayabas formerly known as Principe and Infanta; in fact, the entire coast of Luzon south of Antimonan is a virgin forest. The above-mentioned forests in Luzon will aggregate an area of at least 3,000,000 acres. The foregoing is a conservative estimate, and any change made later will doubtless be to increase the estimate instead of reducing it. There is much merchantable timber left in the provinces of Tayabas, Camarines, parts of Bulacan and Bataan.

"The islands of Mindoro and Paragua, each containing an area of more than 2,000,000 acres, are covered with a dense stand of virgin timber.

“Mindanao, with an area of 23,000,000 acres, contains more than 10,000,000 acres of virgin forest. Samar and Leyte—both large islands—are heavily timbered.” In these areas average stands are found to run to seven thousand cubic feet per acre in trees with a diameter of over twenty inches, and some acres reach ten thousand cubic feet. It is characteristic of the Philippine forest that the species grow scatteringly; few pure stands of a single species are found anywhere.

Many of the varieties of native timber are of the highest value and are in great demand, whilst among the many other kinds which are little known some may discover unsuspected utilities upon investigation and test.

SOME VARIETIES OF COMMERCIAL TIMBER.

Tindalo, a dark red wood, is found in many of the islands. It is suitable to all kinds of construction, and on account of its durability and susceptibility to a high polish is widely used in the East for fine cabinet work.

Ipil is abundant in the Archipelago. With age it assumes a purple-black color resembling ebony. It is practically impervious to decay, pieces which have been in use a century showing no signs of deterioration. It has a reputation for durability in the ground and where it is in contact with cement and mortar and is well adapted to use for railway sleepers. There is a large demand for it in China.

Narra is called "the mahogany of the Philippines." It seasons well and admits of a high degree of polish. It is used in cabinet work, being the material from which nearly all the furniture of Manila is made, but is a first class wood for general purposes. It is classed in the London market with Padouk or Burmese rosewood, and is similar timber to the redwood of the Andaman Islands. Being impervious to the attacks of white ants, it is especially valuable in the East. There is a white species of narra which has all the qualities of the red variety.

Molave is found in most of the islands. The wood is white. It has many excellent qualities. The tree produces timber from 11 to 22 feet long and from 12 to 24 inches square. It resists sea-worm, white ants and other borers and is therefore valuable for many kinds of works where an extra durable material is required. It can not be surpassed for railroad sleepers, being practically everlasting. This wood has been identified with what, as "New Zealand teak," has long been known commercially and highly prized for its endurance under water.

Apitong is a greyish wood which grows abundantly in various parts of the Archipelago. Large quantities of the timber have been shipped to China, where it is in constant demand for the framework of houses and for ship's planking.

Yacal is found in Luzon, Mindoro, and Panay. It grows to a height of from 12 to 20 meters. The wood

is used in the construction of buildings and in cabinet work. It is of a darkish yellow color, has a fine and solid texture, breaks with long splinters, and is proof against the onslaughts of white ants.

Guijo is widely distributed throughout the Archipelago. It is a light red wood with undulating fiber, strong and flexible and with well-defined pores. It is used in ordinary and in naval construction, and largely for carriage wheels and shafts in Manila. In Hongkong it is the material for wharves, for decks, for flooring, and for other purposes where a tough and elastic wood is required.

Lauan is found all over the islands. It is a reddish white wood of loose and filaceous texture with distinctly marked pores. It is extensively used in naval construction, and the natives often employ it as a covering or sheathing for hardwood floors. It can be turned to the same general uses as our pine, poplar, and other soft woods, and has the advantage over them of resisting white ants. The foregoing are only a few of many woods of commercial importance which are to be found in the vast forests of the Philippines.

OFFICIAL AND PRIVATE TESTS OF PHILIPPINE TIMBER.

Captain Ahern says, "several hundred varieties of native woods are received in the Manila market during the year. Spanish engineers tested and described only some seventy varieties, so that we have

many species in the market to-day that are not popular owing to the lack of reliable information concerning their strength, durability and suitability for construction purposes. Where strength and durability are especially desired there are no finer construction woods in the world to-day than molave, ipil, and yacal."

Two of the bridges over the Pasig were laid with molave blocks ten years ago, and although it has been subjected to the heaviest traffic of the city, the pavement is practically as sound as ever.

The Pullman Palace Car Company imported forty-eight logs of various Philippine hardwoods by way of experiment, and their superintendent declared that they were the best woods that ever entered their works, but the cost, due to heavy freight rates and crude methods of lumbering, prohibited their use at present. However, the islands have no need to look to the United States for a market; the demand at home and in the Orient for Philippine lumber is certain to exceed the supply for years to come.

Several varieties of ebony for which there is a constant demand in Europe and America are found in the Archipelago. A lumberman who has been in the Philippines for twenty-five years gave the following testimony before the Peace Commission in 1899: "They have in the Philippines a wood that is better than ebony; it is called alintatao. It is best fitted for furniture, but may be used for anything you have

a mind to turn it to. It is a lasting wood. . . . I would recommend alintatao and narra as the finest woods for furniture." From careful tests made by the Insular Forestry Bureau and comparison with results obtained by the United States Agricultural Department, the following table has been compiled. Some of the Philippine group show remarkable strength. Apulag-amo subjected to the "compression endwise" strain exhibited a resistance of 15,110 pounds per square inch; the stress of elastic limit equaled 17,620 pounds per square inch, and the strength at rupture equaled 19,700 pounds per square inch.

PHILIPPINE WOODS		AMERICAN WOODS	
Apulag-amo	15,110	Pignut hickory	10,900
Betis	11,270	Mockernut hickory	10,100
Dungon	10,370	Butternut hickory	9,600
Molave	10,400	Pecan hickory	9,100
Calamansanay	10,370	Cuban pine	9,080
Dilang butiqui	9,780	White oak	8,500
Bitanhol	9,670	Texan oak	8,100
Ibil	9,000	Green ash	8,000
Tindalo	8,800	Water oak	7,800
Supa	7,230	White ash	7,200
Tucan calao	7,170	Long leaf pine	7,930

SCIENTIFIC SURVEY BY THE INSULAR FORESTRY
BUREAU.

The Insular Bureau of Forestry is pushing the work of examining and surveying the public forest lands as rapidly as is consistent with thoroughness and the force at its disposal. The surveys afford

much useful information regarding the stands and varieties of timber, their peculiarities of growth, character of the soil and rock formation. In addition there will be notes on logging, methods and cost of logging, labor, means of transportation, character of roads and streams, as well as a topographical map on which will be shown the location of the valuation surveys, thus enabling anyone to see at a glance the amount and value of timber available and the possibilities of bringing it to market. The investigation will extend all over the islands as trained men capable of managing such work are secured from the United States. This system of detailed survey has been in operation for four years, and a considerable extent of territory has been covered.

It may be well to state that no exploration of the Philippine forests has ever been attempted before upon a similar scale, and that no scientific examination of the stand of timber has ever been made. The only reliable information available on the subject is that which has been secured by the Insular Forestry Bureau and the experts employed by the Philippine Commission at various times to make special reports.

The statements of casual observers are apt to be misleading. Foreman sums up the difficulties of lumbering in the islands very fairly, and concludes that "with sufficient capital, a handsome profit is to be realized in this line of business." Sawyer, in his delightfully breezy but somewhat dogmatic style,

disposes of the Philippine forests in a few paragraphs designed to demonstrate that they are not worth the working. He tells us that "the greatest nonsense is talked about the value of the Philippine forests, but in fact it is only in the fever-stricken island of Mindoro and in certain parts of Palawan and Mindanao that any large and valuable trees can be found. . . . In Luzon all the large trees of valuable timber have long ago been cut."* These and most of the other similar assertions contained in Sawyer's chapter on "Forestal" are contradicted by established fact.

The following matter relating to the Philippine forests is, in the main, derived from the official report of the Chief of the Bureau of Forestry, and where quotation marks appear they indicate literal extracts from that document.

For the most part, the forest territory is well supplied with streams sufficiently large for driving logs. In some cases they may require a little clearing. The native operations are conducted upon the simplest and easiest lines without regard to ultimate results.

* For refutation of these statements see the report of the Chief of the Forestry Bureau; the preliminary report on working plan of Bataan Province by Forester R. C. Bryant; and the report of Mr. John Orr, manager of the Philippine Lumber and Development Company. All of the foregoing are contained in the Report of the Philippine Commission, Part I, 1902.

The water courses and the *carabao* are the only means of transportation from the stand. In the former case bamboo rafts are often needed to give buoyancy to the dense hardwoods and in the latter the haul must be adjusted to the limited capacity of the beast. As a consequence the native seldom gets out the largest trees, and if he touches them, usually cuts at a wasteful height, sometimes twelve or fourteen feet from the ground. Such a thing as a cross-cut saw is unknown in the Philippine forest. All the felling and other work is done with a long, narrow, single-bitted axe, and in order to minimize the labor the chopper often burns the tree partially through. The enormous waste involved in such crude methods may easily be imagined. It is estimated that of the amount of marketable timber cut, no more than thirty-five per cent. is got out.

WASTEFUL METHODS OF NATIVE LUMBERING.

A fact mentioned by Captain Ahern strikingly illustrates the haphazard nature of the industry as carried on at present. It appears that there is in the vicinity of Manila a fine tract of timber land which has been protected up to the present by the presence of a slight obstruction in a stream that an American company would have removed in a few days and at a nominal expense.

The average haul to tidewater is short, and "a combination of a short line of railway with the wire cable

system of logging would be ideal for a country with the topography that these islands present." In some localities skidding for short distances with *carabao* might be necessary in combination with the plant in question.

Under the present system the licensee usually contracts with the loggers to deliver on the beach certain species of hewn timber. The loggers pick out the likeliest trees for their purpose, chop and burn them down, cut off such logs as their *carabao* can draw and leave a remainder of from forty to sixty per cent. to decay upon the ground. As a consequence of this method of logging the forests on many of the islands have been culled to a distance of two or three miles from the coast and in the vicinity of the larger towns. The Philippine Lumber and Development Company have found that three miles on a straight line or five miles following the winding of a valley are the extreme limits of profitable lumbering with the *carabao*. Successful operations on any scale of magnitude will depend to a great extent upon the employment of this animal in only an auxiliary capacity. *Carabao* are now scarce and cost from seventy-five to one hundred dollars. Although strong, they are not hardy beasts. They need to be watered several times a day, which, aside from the inconvenience and waste of time often entailed, renders their employment upon high mountain slopes, where much of the best timber is to be had, practically impossible.

Nearly all the timber that is shipped to Manila is squared in the forest, and is usually from 12 to 24 inches wide at the top and as long as the *carabao* will haul. This limitation leads to a great deal of the clear length being left in the woods to rot. Special efforts are, however, made to get out extra lengths for use in shipbuilding. The logs of dungon, betis, and guijo will sometimes measure from 50 to 60 feet; those of batitinan, mangachapuy, and palo-maria from 19 to 32 feet. Lanan, the tree from which *bancas* are chiefly fashioned, is occasionally cut the entire clear length, and gives a boat from 32 to 65 feet long and from 24 to 48 inches wide. Lauan, and more especially apitong, furnish boards with a top diameter of 12 inches and from 82 to 98 feet long. Molave timbers are seldom over 16 to 32 feet long and 16 to 32 inches square. However, there is a demand for the crooked, tough and durable branches of molave and dancalan for purposes of ship construction. Calantas is used mainly for cigar boxes, but also to a limited extent for interior finishing. It yields logs of 65 feet and occasionally as long as 98 feet.

COST OF LUMBER OPERATION UNDER THE PRESENT
SYSTEM.

The Philippine Lumber and Development Company pays the following scale of wages: Choppers and hewers, 35 cents per day, without board; trail-builders, skidders, and drivers, 25 cents per day,

without board; hire of *carabao*, 50 cents and 75 cents per day. For sawing the hewed timber into boards by hand they pay the following prices per square foot:

	Cuartos.*
Dungon and betis	4
Molave, dancalan and acle.....	3
Guijo and mangachapuy	2
Apitong and lauan	1

The cost of logs laid down on the beach varies from 3 to 15 cents per cubic foot; the average for logs of superior woods is less than 10 cents. Modern facilities would greatly reduce these figures. The transportation charges per cubic foot for logs delivered in Manila are: From Masbate, 20 cents; from Tayabas, 15 to 17½ cents; from Subig (by raft), 21½ cents. Lumber companies using their own vessels would reduce the cost of transportation to about one-third of these rates.

The following table of quotations for logs and boards in Manila is a fair criterion of average prices, but the tendency is constantly upward as the demand increases without any appreciable expansion of the local supply:

Molave, in log, per c. f., 37½ cents; sawed, per c. f., 80 cents; M. B. M., \$75.00.

Narra, in log, per c. f., 41½ cents; sawed, per c. f., 83½ cents; M. B. M., \$82.50.

* Cuarto equals about one-third of a cent.

Ipil, in log, per c. f., 34 cents; sawed, per c. f., 74 cents; M. B. M., \$62.50.

Guijo, in log, per c. f., 22 cents; sawed, per c. f., 65 cents; M. B. M., \$40.00.

Supa, in log, per c. f., 21 cents; sawed, per c. f., 64 cents; M. B. M., \$45.00.

Lauan, in log, per c. f., 13 cents; sawed, per c. f., 27 cents; M. B. M., \$19.00.

Tanguile, in log, per c. f., 16 cents; sawed, per c. f., 50 cents; U. S. C. M., \$25.00.

Apitong, in log, per c. f., 16½ cents; sawed, per c. f., 31 cents; U. S. C. M., \$25.00.

POSSIBILITIES OF THE LUMBER INDUSTRY.

The Chief of the Forestry Bureau states that "there is a demand in Manila, in fact all through the Orient, for construction timber; the demand will continue as many important public works are in contemplation in the Philippines, many private enterprises will make demands, thousands of houses must be built, and when the present condition of these islands and the vast amount of work to be done are considered it would be difficult to foretell when the present high prices of lumber will materially lessen. . . . The United States market is not considered in this proposition. The Philippines market will be strong for many years. The Chinese market is always strong and always will be, for all of lowland China is without timber. The Philippine construction timber

is considered by many engineers in China the best timber to be had in the Orient. Strong as has been the Chinese market for timber in the past, the future promises even better, as there are indications that foreign enterprise and capital are securing concessions which will waken that vast Empire. . . .

“There are very few lumber companies here properly equipped to handle large logs; it will take companies contemplating such work many months to establish themselves, to secure labor, and transportation to deliver their first cargo; and if such companies are not prepared to furnish master mechanics, expert gang bosses, in fact all the skilled labor required, with a full stock of the best supply material, it would be hazardous to attempt to remove the large logs which must be cut and brought to market if these forest tracts are exploited properly.”

At this time the Philippines are not exporting one-fiftieth of the lumber for which a profitable market could be found under scientific and economical methods of production, whilst each year large quantities of pine and redwood enter the country from Oregon and California. A corporation with, say, \$2,000,000 capital operating logging roads, saw-mills and a fleet of sailing vessels, including barges for inter-island transportation, would surely return handsome dividends to its stockholders. The profits would permit such vessels to return in ballast, but as a matter of fact cargoes from Hongkong are always obtain-

able, and schooners delivering at the Pacific ports of the United States might carry back American soft woods. The need of the trade for specially-built lumber vessels is pronounced. It is often necessary to cut up logs at the port of clearance in order to load them upon ships of limited hold capacity. Under present conditions the establishment of a market in the United States for the valuable hardwoods of the Philippines is impossible, but a company running vessels direct to Seattle or San Francisco could, without doubt, open up such a market, and create an active demand amongst manufacturers of high-grade furniture and finishings. By jobbing its product in this country the company would save all the profits from the forest to the factory.

Considering the facility with which operations might be instituted, the known superiority of the product, the certainty of markets, and the high prices obtainable, lumbering offers the best field for the heavy investment of capital in the Philippines.

FORESTRY REGULATIONS.

Corporations giving evidence of their ability and intention to operate upon a scale of considerable magnitude may secure from the Forestry Bureau licenses for a period not to exceed twenty years. The area within which the company may work will be specifically defined and the trees to be cut will be indicated by a government forester. This official will measure

the timber felled and assess the charges. Marketable timber is classified in four groups, and the territories in two divisions. The tariff is regulated primarily by the character of the timber, modified, however, by the locality in which the operation is conducted. For instance, the tax upon a tree of the first group felled in Mindanao would not be as great as that upon a similar tree cut in a locality, say Bataan, more accessible to the Manila market. It is easy to conceive that a company operating its own vessels might derive an enhanced advantage from this arrangement. The government charge will probably average about six per cent. of the selling price.

Several companies are now negotiating to secure tracts of land large enough to justify the installation of modern plants, and it is likely that within the next few years the output of Philippine lumber will be very much increased.

During 1903 upwards of five million cubic feet of lumber was marketed, of which 4,740,738 cubic feet, valued at about \$175,000, came from the public forests. In the same year 87,000 board feet of native lumber were exported. On the other hand there were imported 113,483 cubic feet of lumber on commercial liners, as well as 6,841,207 board feet and 4,746 foot tons for the use of the Government. The imported lumber was laid down in Manila at from \$37.50 to \$48.50 for Oregon pine and at from \$45 to \$55 for redwood per thousand board feet.

Gutta Percha is one of the important products of the Philippine forests. Elsewhere the tree is found only in the Malay Peninsula, Borneo, Sumatra, and the small islands lying between them. Tawi Tawi and Southern Mindanao are the sources of the Philippine product. The gum is secured by a ruinous method which, unless it is checked, must ultimately result in extinguishing the already inadequate supply. The practice of the native gatherers in all gutta percha regions is much the same. The tree is cut down and the bark ringed so that the milk flows from it at several points. The outflow is caught in cocoanut shells, and a tree yields at the utmost two pounds, which is about ten per cent. of its capacity. The output of the Philippine forests is handled exclusively by Chinese traders, who make enormous profits in the business. The prices paid to the Moros range from ten to fifteen *pesos* per *picul*, and payment is frequently made in cloth and other commodities. The Chinaman's standard *picul* in buying, a fictitious measure created by himself, is 162½ pounds, whilst he markets the product at the Chinese *picul* of 133½ pounds. Singapore is the central depot for gutta percha. Practically all of the production is shipped there, and thence distributed. In the past fifty years upwards of 300,000,000 pounds of the material have been received at Singapore. A writer in "Opportunities in the Philippines" suggests that these figures afford some clue to the number of trees which have

been destroyed in that time, calculating on a basis of two pounds to the tree, and allowing ten per cent. for wastage. The result of such a computation, however, would fall very short of indicating the actual extent of the destruction.

The Insular Government has under consideration several plans for putting a stop to present methods in the industry, and it is likely that the production of gutta percha in the Philippines will become a semi-monopoly of the Government. Unless something of this sort is done the trees will disappear from the Archipelago in the course of twenty years, if we may judge by the number which have been removed during the ten or less years that the industry has been in existence.

THE GUTTA PERCHA TRADE.

The chief, almost the sole, use to which gutta percha is put is in covering electric submarine and land cables. It is practically impervious to the action of water and so admirably adapted to these purposes for which no satisfactory substitute has been found. During the past decade the price and demand for the material have greatly increased with very little response in the supply, however. The quotation for the different varieties have trebled in that time.

In recent years extensive scientific experiments have been made in the direction of the cultivation of the tree and the extraction of the latex. It is

found that the leaf yields a good grade of gutta percha which on test has proved to provide a satisfactory insulating material.

The future of the industry in the Philippines must depend upon planting and strict Government regulation. It would seem that a gutta percha monopoly conducted somewhat upon the lines of the opium monopoly of the Indian Government would produce the best results with the greatest benefit to all concerned. It would probably provide a congenial and certainly a profitable occupation for a large portion of the population of southern Mindanao and the Sulu Archipelago and could hardly fail to be a powerful factor in reducing them to orderly industry. Such an arrangement would also work toward a solution of the *dato* problem. The *dato* might be usefully employed as a sort of supervisor in his district as the *zamindar* is in the Indian opium village. The Bengal system includes advances to the cultivator, which are deducted from the payment for his produce when he brings it in. And this would necessarily be a feature of a governmental system of cultivating gutta percha in the Philippines. The Indian *ryot* may cultivate opium or not, as he chooses, but if he does so the Government undertakes to buy his produce at stated figures, whilst it places certain restrictions upon the methods of growth and extraction. In short, the Indian opium system appears to afford an admirable model for the Insular Government in the establishment of a state monopoly in gutta percha.

Rubber trees and vines are found in almost all tropical countries, but marketing the product generally presents so many difficulties that the industry is profitably pursued in few parts of the world. The demand for rubber is permanent at good prices and the supply in recent years has never satisfied the market. The uses of the material are constantly extending and nothing can be found to take its place.

RUBBER MAY BE A LATENT SOURCE OF WEALTH.

The Philippines do not at present afford a field for the rubber industry, although the plant grows luxuriantly in the southern islands. The Forestry Bureau, fully alive to the importance of gutta percha and rubber, is making experiments and investigations which should lead to the scientific and profitable cultivation of both.

Expert opinion favors the belief that rubber plantations in the Philippines under skilled direction, employing the best methods of extraction, should give rich returns to investors. This is not, however, an enterprise to be entered upon without ample knowledge and experience. A considerable amount of capital is also necessary to success, for although it is authoritatively stated that the returns would be from \$150 to \$200 per acre, the first crop could not be expected short of six years after planting, and it would be subject to some danger of destruction or damage. It would seem that in several of its features rubber cultivation resembles that of cacao.

As a result of the ravages of war and the inroads of rinderpest, the cattle-raising industry of the Philippines has become extinct during the past few years. Ten years ago large herds of cattle and horses were to be seen everywhere, and especially in northern Luzon. In 1902 Mr. Elmer Merrill reported to the Insular Bureau of Agriculture: "From enquiries made along the route I learned that the cattle industry was at one time quite prominent in Nueva Vizcaya, and especially so in Isabela, but due to the insurrection and recent ravages of rinderpest the herds have been much depleted or entirely exterminated. In Nueva Vizcaya I saw only about twelve head of cattle, but they were in magnificent condition. In Isabela I saw but two herds—one of about twelve head and one of about twenty-five—and like those in Nueva Vizcaya, they were in excellent condition." To-day there is not a herd of considerable size in the Archipelago. In a less degree, but very seriously, the number of horses has been reduced by surra and glanders. In order to relieve the consequent distress as much as possible the Insular Government imported large numbers of draft animals from India and China, but at the best this could only be a temporary measure.

It is questionable if a native even amongst those who have the money could be induced to re-enter the industry, so fearful have they become of the dread rinderpest. But the investigations of the Bureau of

Agriculture lead to the belief that immunity from both rinderpest and surra may be secured by inoculation. However that may be, there are methods by which cattle raising can be carried on in the islands with practically no risk of disease and the returns for years to come would be extremely large.

LUZON HAS THE FINEST GRASS COUNTRY IN THE
WORLD.

Mr. Merrill states, and he is corroborated by several observers, that "most magnificent grazing grounds exist in eastern Pangasinan, northern Nueva Ecija, Nueva Vizcaya, Isabel, and Cagayan, probably also in the other provinces, mostly rolling uplands in the three former provinces and broad level prairie lands in the two latter, although so far as abundance and quality of the grasses are concerned there is apparently no difference, the same species growing on the prairies as on the hills. These grasses consist of . . . fine-stemmed, fine-leaved grasses which in the United States would be popularly known as bunch grasses, as they mostly grow in small tufts, not being true turf-forming grasses, yet there is sufficient abundance of turf-forming or partially turf-forming grasses so that, notwithstanding the heavy tropical rains to which this region is subject during several months of the year, so close is the turf that absolutely no signs of gullying or washing were observed even on the very steep hillsides, . . .

A STREET SCENE.

Lower-class natives of the City of Cebu. The practice of carrying children upon the hip as shown in the illustration is common to many Oriental peoples.

From Stereograph Copyright, by Underwood & Underwood, New York



which shows what may be expected if cattle are ever introduced here in abundance. . . . The grazing lands in eastern Pangasinan, northern Nueva Ecija, and throughout Nueva Vizcaya are characterized by their rolling, hilly character, the ravines, and small valleys, tops of the higher hills, and surrounding mountains, being densely forested, while in every small valley one finds streams of pure, clear water, it being impossible to travel three or four miles in any direction without finding good water. Hence it will be observed that there is an abundance of feed, water, and shelter, the requisites for an ideal cattle country; and especially to be noted here are the topographical features of the country which in cases of epidemic of rinderpest are of especial value, as in these valleys whole herds of cattle can be isolated, and with a little care and watchfulness, guarded for months against infection by contact or through the water supply."

READY MARKETS FOR PHILIPPINE CATTLE.

There are no better grazing grounds than these in the United States, probably not in the world, and under the conditions described, cattle might be raised with little or no risk and of the finest quality. The districts in question have the advantage of proximity to the Manila market, whither the herds might easily be driven upon the hoof. Before long, however, the railroad will run through a great part of these grazing grounds in Nueva Vizcaya and Nueva Ecija and

the Manila-Dagupan line is already sufficiently near to those of Pangasinan.

At present all the meat consumed in Manila is shipped in on the hoof from Singapore or as refrigerated meat from Australia and the United States. The prevailing prices are high, and would yield a handsome profit to local cattle raisers. It is an industry that would require comparatively little capital for its prosecution in the Philippines. The stock would be mainly the native cattle of India and China, which thrive in the Archipelago. The trotting bullock of India would appear to be a likely beast for introduction to the Philippines, and, indeed, he is employed to a slight extent in Pangasinan.

Another source of profit in this connection is hay. The districts under consideration would give a heavy yield per acre of the finest quality, and the character of the ground is such as to permit of cutting and harvesting being done by machinery. At present thousands of tons of hay are imported from the United States yearly at figures that would give good returns to the home grower.

A corporation that should raise sufficient cattle to supply the local demand and run a plant for the utilization of the by-product would without doubt realize large returns on its capital.

MINERAL WEALTH.

It is impossible to say anything very definite about the mineral resources of the Philippines. They have

never been thoroughly investigated, and what little mining has been done was of a desultory and not over-scientific character. It is an established fact that rich deposits of various valuable metals and of coal exist, but with few exceptions the precise extent and nature of them have not been ascertained. However, the investigations of the Insular Bureau of Mining and the discoveries of more than a thousand practical American miners who are prospecting in the Archipelago will throw a great deal of light upon the subject in the near future.

From present knowledge it would appear that the most promising fields are in Benguet and Lepanto-Bontoc. The Reports of the Philippine Commission (1902-1903) state that "in the province of Lepanto at Mancayan and Suyoc there are immense deposits of gray copper and copper sulphide, and running through the ore are veins of gold-bearing quartz which is more or less disintegrated and in places is extremely rich. This copper ore has been assayed and the claim is made that it runs on an average eight per cent. copper, while gold is often present in considerable quantities. The deposits are so extensive as to seem almost inexhaustible. . . . As early as 1856-57 two concessions were granted to the Cantabro Philippine Mining Company, and an attempt was made to exploit them and market their product. Rude methods of mining, ruder methods of extracting the metal, and still more rude and

primitive methods of transportation, combined with lack of sufficient capital and suitable labor, led to the abandonment of this attempt, and for more than twenty years the property, which in itself is a small claim upon the immense ledge above referred to, has been occupied only to the limited extent required by the Spanish mining laws to prevent the cancellation of the concession. The officer at present in charge of the Mining Bureau characterizes this deposit as an 'undoubted bonanza.' The main thing necessary to its exploitation is the opening up of a short line of communication with the coast." And it may be added, this is probably the chief requisite to successful mining in several parts of the Archipelago.

GOLD HAS BEEN MINED FOR CENTURIES.

Gold is known to exist in various states on several of the islands, but to what extent it may be worked with profit is yet to be definitely determined. The Igorots have carried on placer mining for centuries and with apparently good returns. They never attempt extraction from rock that fails to exhibit a considerable quantity of free gold. Modern mining machinery has never been used in the country, and its introduction may reveal altogether unsuspected possibilities. In some localities the conditions are favorable to hydraulic mining. Prospectors in the Lepanto-Benguet-Bontoc district, according to the re-

port of the Commission, have located very extensive deposits of low-grade free-milling ore which will yield large and certain returns under scientific treatment. Unless the statements of those who have been working in this region are utterly false very valuable deposits have been located. These men, who are for the most part experienced miners from our Western States, have had sufficient faith in their claims to camp upon them for many weary months whilst waiting for the passage of mining regulations that would establish their rights and permit them to operate. These desiderata were effected by an act of Congress dated October 7, 1903, since when several mining enterprises of importance have been set on foot with good prospects of success.

IRON AND COAL EXIST IN ABUNDANCE.

There are undoubtedly deposits of high-grade iron ore in different parts of the Archipelago, but until the coal measures have been more extensively opened up iron cannot be profitably worked. Coal* is one of the pressing requirements of the Philippines. At present it is imported in large quantities from Australia and Japan and costs wholesale in Manila from \$5 to \$7 per ton. The production of local coal,

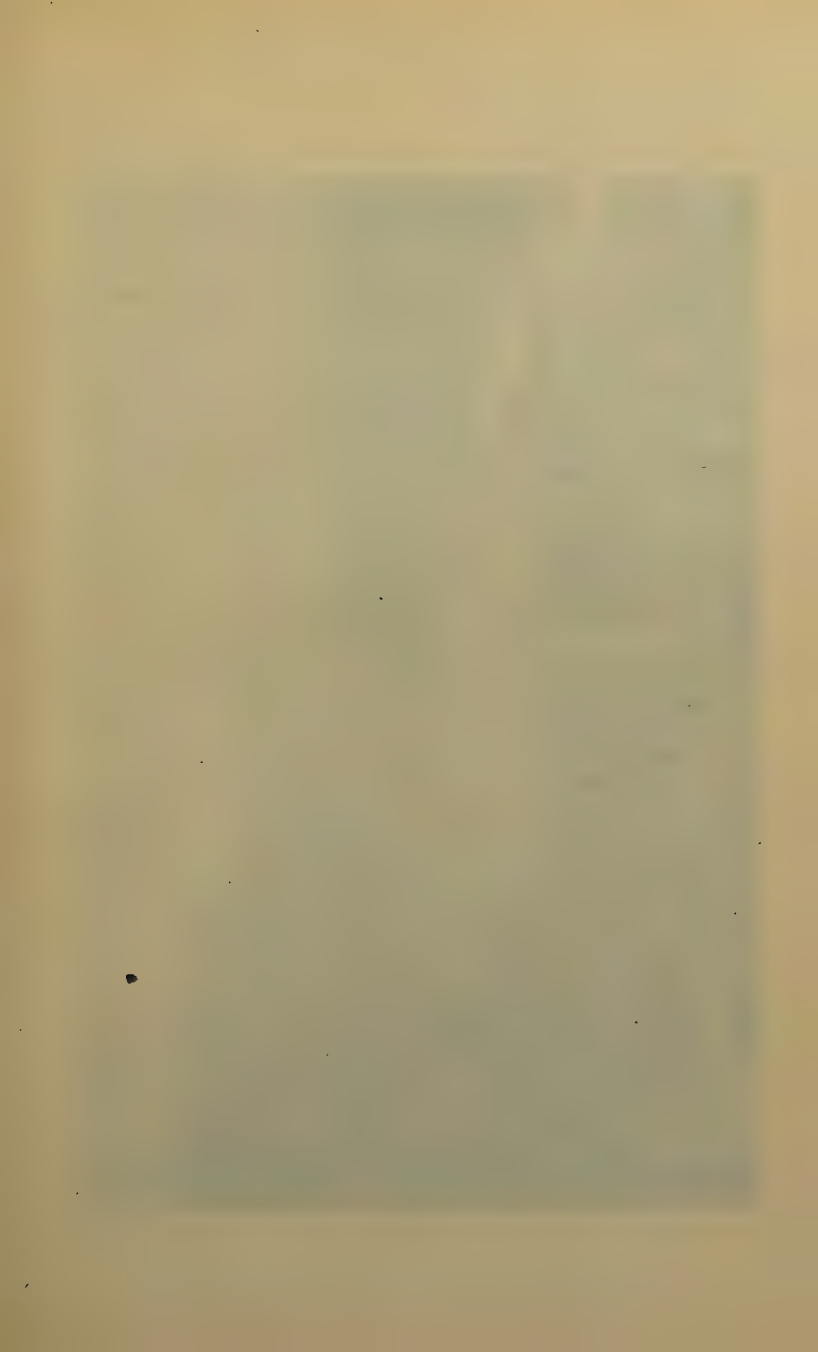
* "The Coal Measures of the Philippines," C. H. Burritt, Bureau of Insular Affairs, Washington, D. C. This publication is recommended to those who are interested in the subject.

which could be put upon the market at about half the price with profit to the miner, would give a great impetus to all kinds of manufacturing enterprises in the islands. Lignites are known to exist in Luzon, the Island of Batan, Mindoro, Masbate, Negros, Cebu, Mindanao, and other islands. The island of Batan, which is a dependency of the Province of Albay, has been described as "a solid mass of coal." It is now in a process of rapid development. Several private corporations as well as the United States Government are engaged in mining upon the island. A company has opened rich deposits upon the east coast and has constructed an electric railway connecting the mines with a deep water harbor on Calanaga Bay.

The Chief of the Mining Bureau is of the opinion that the most important of the mineral resources of the Philippines is the best grade of lignite of which there are two varieties—black and brown. The best coal is free from sulphur, relatively low in ash, and is found in the Island of Batan, in Bulalacao and Semarara, southern Mindanao, in Danac and Compostela, Cebu; on the Gulf of Sibuquey, in southern Mindanao; at Colatrava, Negros; and at Bislig, in eastern Mindanao. It is of the Tertiary age and similar in most important respects to the products of Wyoming, Washington, and Japan. Some of the coal of Abra, Rizal, and eastern Negros is also believed to be suitable for use in steamships and stationary furnaces, but there is some difference of opin-

ion on this score among experts. One of the most promising fields is that near Bulalacao. There is a good harbor, which affords anchorage throughout the year, within four or five miles of the deposits. Some of the Cebu coal fields enjoy similar advantages. The black coals can in most cases be mined free from pyrites; they are firm enough for transportation; can be taken out at reasonable cost, and should therefore be able to entirely take the place of the imported article in the home market and supply all the local demands of steamships.

The Commission reports that "testimony is unanimous to the fact that the Philippine coals do not clinker, nor do they soil the boiler tubes to any such extent as do the Japanese and Australian coals. Some of them have been given practical tests in steamers engaged in the coasting trade of the Archipelago with very satisfactory results as regards their steam-making properties."*





MANILA OLD AND NEW.

X.

MANILA OLD AND NEW.

The Philippines Twenty Years Hence—The Legend of Mariveles—Cavite—The Pasig—Manila Intramuros—The Cathedral—The Old Palace of the Governor-General—The Fortress of Santiago—Santiago's Illustrious Prisoners—Old Manila Unsanitary, like most Spanish Cities—Bonondo the Business Quarter—Costumes of the Citizens—Various Races in the Metropolis—The Suburban Residential Sections—Cock-Fighting the National Sport—The Reformation of Manila—The Commercial Destiny of Manila—Other Ports will share the Fortunes of the Capital.

In the olden days the Spaniard went to the Philippines by way of Mexico, and sailed from Acapulco for Manila in the *State Nao*. The cumbersome, broad-beamed vessel, with its four-storied deck-house abaft, its polished brass carronada, and its sails set to the single mast, left port upon its perilous voyage with great *éclat*. Perhaps it carried to the insular colony a governor-general in blissful ignorance of the many troubles in store for him. Without doubt there were on board more than one frocked member of the class that was at once the blessing and the bane of the Spanish Indies. Neither friar, nor governor, could eclipse the splendor of the ship's commander, who wore a gorgeous uniform, drew a princely salary,

and carried the title of "General" with stately dignity. Fortunate the galleon if the blessed Virgin of Antipolo guarded it with her presence, for nine times had she crossed the Pacific and never once failed to bring her charge safely into port.

The *nao* was freighted with stuffs of Spanish manufacture, and its commander's cabin contained a chest of Mexican dollars amounting to, perhaps, three millions with which to pay the *Real Situado* and reimburse the Philippine merchants for their shipments.

As the voyage neared its end, a sharp lookout would be maintained for the British sea-hawks to whom many a fat galleon had fallen prey, and eager eyes would scan the promontories of the Philippine coast for beacon warnings of the presence of the dreaded enemy. And when at length the *nao* sailed into the Bay with Spanish sedateness, there was great rejoicing in the Capital. It was a jubilee occasion, and all Manila gave itself up to festivity. Bells rang from their towers, bands of music paraded the streets, buildings were bedecked in bunting, officials came forth in full uniform, and the people donned holiday dress. In all the churches a solemn *Te Deum* was chanted in thankfulness for the glad event.

THE PHILIPPINES TWENTY YEARS HENCE.

Twenty years hence the American traveler bound for the Philippines will voyage upon a turbine-driven

ship, one of many vessels converging from all points of the compass upon the Island of Luzon. He will land at some bustling port on the Pacific coast, perhaps in the Gulf of Lagonoy, thereby saving seven or eight hundred miles in the journey from San Francisco. The railroad will carry him up to Manila through a country abounding in the fruits of the field, past busy towns and flourishing plantations. Everywhere he will perceive the evidences of a people awakening to their opportunities and happy in the beginnings of a vast prosperity. American capital and American enterprise will ere then have made their vivifying effects felt in the land; iron and coal will have begun their magic work; the steel plough and the harvester will have largely displaced the *carabao* and the *bolo*; the *are* which now returns a *picul* will then yield three.

Manila, the future "Hub of the Orient," will, before twenty years have passed, be one of the most frequented ports in the East. The City will be the best lighted, the best paved, the best drained, and the best governed municipality east of Suez and Panama—and the promise of all these things is already in evidence.

To-day one must go to Manila via Yokohama and Hongkong. The six hundred and thirty miles from the latter port, across the ever-restless China Sea, are covered in a small steamer of the coaster type. At the entrance to the Bay, which might more correctly

be termed a gulf, the vessel is still thirty miles from the City. Upon the left is Mariveles. A signal station will soon be established at this point, and here incoming ships will be boarded by the customs officers, so enabling passengers to avoid what has been in the past a vexatious delay.

THE LEGEND OF MARIVELES.

A romantic legend attaches to Mariveles. Some-time in the seventeenth century, so the story runs, there was in one of the convents of Manila a young Spanish girl whose name, before she assumed the veil, had been Maria Velez. The lovely recluse formed a *liaison* with a monk and they decided upon a desperate plan to leave the islands. Together, the girl disguised in a friar's frock and cowl, they fled and reached the village which is now called Mariveles, in a canoe. Here they designed to lie hidden until the galleon bound for Mexico passed. In the meantime the affair had created great excitement in Manila, where a hue and cry was raised, but without avail, until a native brought news of the whereabouts of the fugitives. They were found upon the open shore in a pitiable condition. The priest, who had been compelled to battle with the natives for the possession of his companion, was at the point of extreme exhaustion, whilst the girl bordered upon insanity from fright and exposure. They were carried back to the City and effectually separated for all time. The

friar was assigned to a remote parish among wild tribes and the nun was despatched to a convent in Mexico.

Passing Corregidor, with its lighthouse and picturesque but harmless fort, the vessel is clear of the islets that beset the entrance to the Bay of Manila, which is sufficiently capacious to accommodate all the navies of the world. The roadstead has been subject to almost the full force of the monsoons, but amongst the many improvements in progress is the construction of an ample breakwater. Four millions are to be expended upon Manila harbor, which will have a mean depth of thirty-five feet at low tide. The system of docks and warehouses when completed will surpass anything of the kind in Asia or America. These combined facilities must make the capital of the Philippines, which, according to La Perouse, occupies "the finest commercial site of any city in the world," the safest and most convenient port in the Orient.

THE PENINSULA OF CAVITE.

Cavite, on its little "fish-hook" peninsula, comes into view before Manila is clearly discernible. The projecting land upon which Cavite stands forms a fine harbor that probably decided the selection of the place for a naval depot. It was off this point that Montojo's ships went down, or out of action, under the fire of Dewey's guns.

Cavite contains the arsenal, shipyards, dry-docks, and repair shops of the Government. There are forts on the peninsula commanding every approach which, with proper armament, will be an important part of the defenses of the Capital.

Manila lies low, hardly anywhere more than three or four feet above high water mark, and it has no lofty buildings, so that it breaks upon the view of the passenger on shipboard with the suddenness of a Dutch port. The present accommodation will not permit of large vessels approaching much nearer than two miles from shore, and there used to be a great deal of tiresome delay and difficulty about landing. Conditions are much mitigated since our people have had control, and it will not be long before ships tie up at docks and land their passengers from gang-planks.

The traveler's immediate destination will doubtless be Binondo, or one of the residence suburbs, which he may reach in a launch, or boat, but before proceeding to a description of modern Manila we will take a cursory view of the Walled City, symbolical of an order of things which is fast passing away.

THE PASIG RIVER.

The river is fairly crowded with boats of all descriptions, light draft steamers and launches, outrigged *bancas* and dugout canoes. More conspicuous than these, and most useful of all, is the cargo

casco, with its cylindrical bamboo top. The *casco* is at once a freight conveyance and a dwelling. Despite the utter dissimilarity of appearance, one is reminded of the old-time canal barges of England. There are the same signs of permanent occupation. Children hanging over the gunwale, mothers preparing food in the bow and clothing stretched to dry.

These cumbersome, but highly useful craft, are propelled by poling from a framework footway extending along each side. As the management of a *casco* and the handling of its cargo require the services of at least two men, the boat generally houses more than one family. Thousands of these river-folk, in different parts of the islands are born, live and die afloat. It is a quite congenial condition, for the Malay is by heredity a navigator and lover of water, which predilection extends to its personal application and seems to be unfailingly innate with these people.

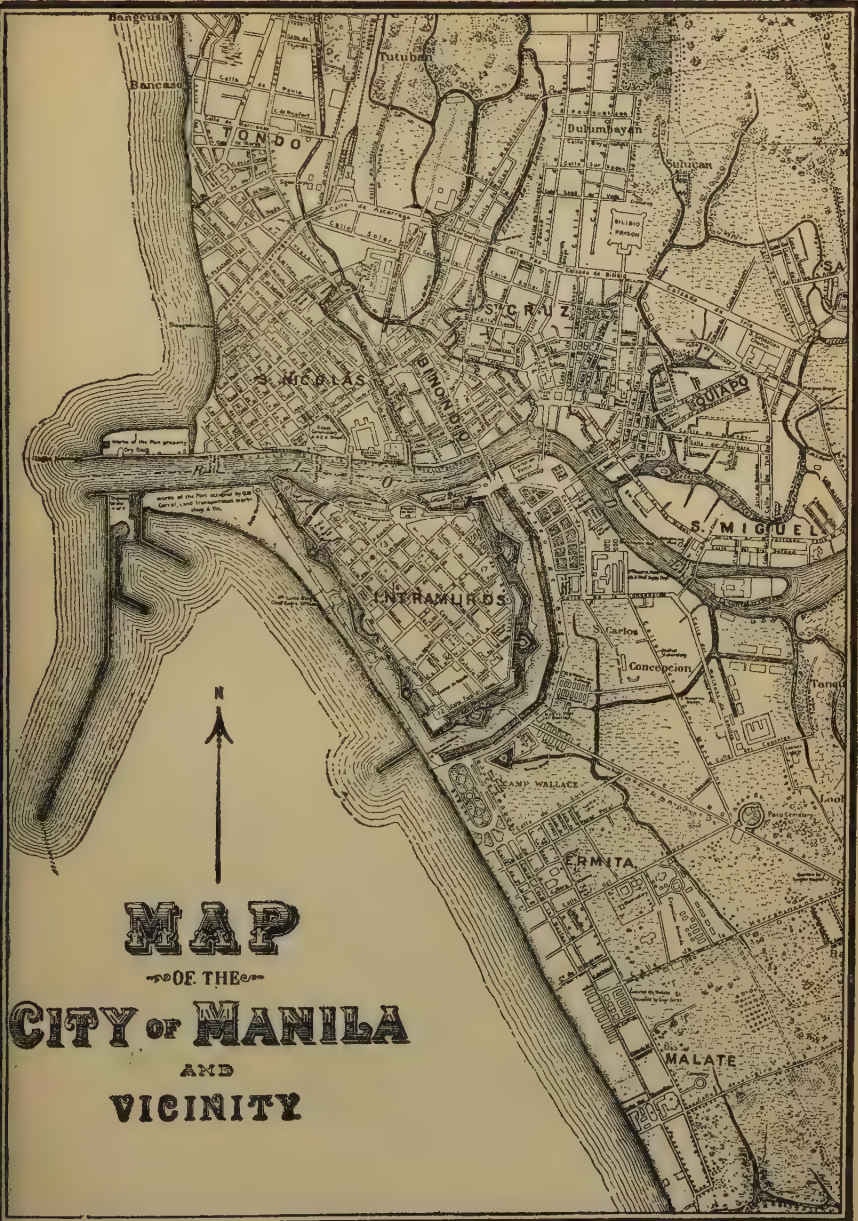
MANILA INTRAMUROS.

Manila is remarkably subject to seismic disturbances, most of which seem to have their center in the Taal volcano, barely thirty miles distant. On an average, shocks are felt in the City once a month, but they are usually very slight, and do no damage. There have been, however, thirty-three destructive earthquakes since the Walled City was founded. The greater proportion (fourteen) of these occurred in the nineteenth century. June the 3d, 1863, at 3.20

p. m., a violent shock threw down the Cathedral, burying a number of worshipers and demolished twenty-five other public buildings, besides injuring a much greater number. In many places the ruins still lie untouched, save for the vegetation which has overgrown them. Portions of others afford quarters for vagrant natives, who share them with bats and monkeys.

The Spaniards built heavily, and this applies to their residences as well as public structures. Thirty-inch walls are common in houses, whilst from ten to twenty feet of solid masonry are to be found in churches and fortifications about old Manila.

It is not at all certain that heavy masonry affords the best protection against earthquakes: at all events, the largest buildings appear to have suffered most in these visitations. Good brick and mortar seem to withstand the shock very well, judging from the fact that the tall smokestack of the Insular Cold Storage and Ice Plant passed through an earthquake a few years ago without showing any mark of injury. As to residences, light structures, such as prevail in Japan, should be the least liable to destruction by these convulsions of the earth, but the Manila builder is between Scylla and Charybdis: a solid building will fall to the shock of earthquake, whilst a typhoon will rip a light one to pieces. It is seldom that the terranean disturbances overturn the native huts, but a cyclone will scatter them like chaff.



Nothing in Manila is built over two stories in height, so that public edifices have not generally an imposing aspect. Nevertheless, as each story is extremely high, the buildings, though almost invariably flat or low-roofed, are far from presenting a squat appearance. The Cathedral, without towers or upper structures, except a stunted dome, gains a certain beauty from the simplicity of its straight lines and something of stateliness from its extensive proportions. It is the finest and most ample place of worship in Manila, but it was erected since 1880, when an earthquake destroyed the former building, the ruins of which, including a partially-demolished bell-fry tower, with some of the bells still intact in their original positions, may be seen adjoining the present Cathedral. The edifice stands upon the site which has been thus occupied since the Archiepiscopate was created in 1595, with Domingo Salazar as the first appointee. Salazar, a grand old man, whose zeal for the welfare of the Colony was unbounded, made the long and arduous journey to Spain and back when he was verging upon his eightieth year for the purpose of laying the needs of his bishopric before the King. He died in Manila whilst the Papal Bull authorizing his investiture as the first Archbishop was crossing the seas.

The eighteenth century map of Manila gives the Cathedral first place, and, indeed, it represented politically and socially the first power of the Colony.

At the time of the most direful peril to the Philippines, when Li Ma Hung, the Chinese corsair, came near to possessing himself of the islands, the aid of Saint Andrew was particularly invoked, and when the danger had safely passed he was declared to be henceforth the patron saint of Manila. In commemoration of the happy deliverance the *Funcion votive de San Andrés* was thereafter celebrated on the 30th of November of every year, when all Manila attended High Mass at the Cathedral. The ecclesiastical authorities made this the occasion of a ceremony designed to indicate the supremacy of the Church. The Standard of Spain was spread upon the pavement of the nave and the Metropolitan walked over it. In recent years the protests of the Governor-General led to the abandonment of this practice and instead of it the flag was thrice lowered before the altar.

The Cathedral was the point from which all processions started and at which they all ended. Manila delighted in her numerous holidays and the processions with which they wound up at night. Along each side of the street would walk, in single file, men, women, and children, each bearing a lighted candle, whilst down the centre would come bands of music preceding groups of priests, who escorted images of the Saviour, the Virgin Mary, and the Saints, borne upon the shoulders of perhaps as many as thirty men. Some of these images were ablaze with gems said to be real, and, if so, of enormous value. Such

images had an additional guard of soldiers with fixed bayonets. The course of the parade was marked by the explosion of bombs and rockets at intervals.

THE OLD PALACE OF THE GOVERNOR-GENERAL.

Upon the western side of the Cathedral square, which was in some sort the public square of the City, stands what was the Palace of the Governor-General. The present Palace, which, like the Cathedral, occupies a site that has been devoted to the same purpose from the beginning of the City, dates since the earthquake of 1863, but the residence of the chief executive was in the modern portion of Manila for several years before the Spanish evacuation. The Palace is a large building, with spacious apartments. It conforms to the general rule of two stories, with all the reception and living rooms on the upper floor. A broad staircase, flanked on either side by a carved presentment of the Lion of Castile, gives ascent to a landing, upon which stands a life-size marble statue of Magellan. Upon the right and left hand of the statue are lofty entrances to a splendid hall one hundred feet long and half as wide. With its polished parquetry floor a more delightful dance-room could not be imagined, and doubtless it has often been given over to that favorite amusement of the Spaniards. The walls are hung with full-size paintings of Spanish celebrities, recalling many a dark deed and many a bright achievement. Returning to the landing, a

stairway upon each side affords ascent to the main floor. The principal apartment is the Council Chamber, furnished with a large carved table and heavy chairs bearing the Royal Arms. Many a strange and stormy scene was enacted around this table during the incessant conflict of Church and State. The windows give upon the square, and it may have been from a similar vantage point in a former building that stout old Bustamente watched the approach of the mob that did him to death.

There are no entire buildings in Manila that can boast of very great antiquity, the Church of San Augustine being probably the oldest. The City has been so often subjected to destructive forces that what structures escaped one, fell to another. The general aspect is one of old age due to the common practice of preserving old styles and employing old material in reconstruction. In many cases surviving portions of a former structure have been included in its successor. One constantly comes across quaint corners and curious nooks that have all the appearance of being many hundred years old, and, of course, there are bits of architecture here and there that date back to the sixteenth century. Several of the ecclesiastical buildings are of the type of mission architecture characteristic of similar Spanish edifices in Mexico and California. The church of San Juan del Monte, which antedates most of those in Manila is a striking example of this type.

In the acute angle of the walls, just at the point where the River merges into the Bay, is the Fortress of Santiago, which for many years acted as an efficient watchdog over the sleepy City lying behind it. More than once it has been the last refuge of the Spaniards, when enemies have gained within the walls. In 1574—but this was before the Walled City was built—the gallant Salcedo at this point made his final stand against Li Ma Hung's barbarian band.

Many a victim of injustice and revenge has pined within the dark, damp, and noisome dungeons of Santiago. Its walls have often echoed to the shrieks of tortured prisoners. Some have found relief in death, others at the *garrote* or from the bullets of Spanish soldiers. In times of disturbance the capacity of the place has been taxed to the utmost, and men have been crowded into the cells, literally as cattle are massed in a freight car, with the result that the weakest saved the courts all further consideration of their cases by dying there and then.

During the Tagalog Rebellion, the dungeons were always packed full. Into some of them the river trickled at high tide so that twice a day the unfortunate prisoners stood in water up to their waists. A fearful tragedy was caused by an officer who, through inadvertence or design, caused the sole source of ventilation to be closed. The next day eighty corpses were removed from the place, but life was cheap and prison room scarce, and the affair does not appear to

have disturbed the equanimity of the authorities in the slightest degree.

SANTIAGO'S ILLUSTRIOUS PRISONERS.

The long roll of prisoners in the Fortress of Santiago includes both sexes and the representatives of all classes and of every rank from the humble fisherman to the proud archbishop. Not the least sad of the stories connected with it relate to men of high degree, for, in the kaleidoscopic changes of political affairs in the Philippines no man knew where the morrow might find him.

Jose Torralba, who had served as acting-Governor for a term of two years, was confined in the Fortress on a charge of embezzling the public funds. The investigation and trial moved with the customary Spanish tardiness, and seventeen years elapsed before sentence was finally pronounced. It included banishment, but, as the old man was then verging upon the grave, he was permitted to remain and beg his bread in the City over which he had ruled. Torralba died in 1736 in the Hospitals of San Juan de Dios, over against the eastern ramparts.

Hurtado de Corcuera, who governed from 1635 to 1644, suffered five years' confinement at the instigation of the ecclesiastics. In the end, however, he was fortunate enough to regain the royal favor and to receive the governorship of the Canaries.

Not so happily did the quarrel of another governor

with the Church terminate. Diego Salcedo was seized by the agents of the Inquisition in the Palace and thrown into a dungeon in the Fortress, where for many years he suffered cruel treatment. Death came as a welcome release on board a galleon which was bearing him a prisoner to Mexico.

In 1751 Sultan Muhammad Ali Mudin of Sulu, his brother, sister, and four daughters, together with about two hundred retainers, who had mistakenly confided in the honor of the Spanish authorities, were imprisoned in Santiago, and there Prince Asin, the Sultan's brother, died.

The citadel is the oldest portion of Manila. It is said that parts of it date from the foundation of the City. Its walls are enormously thick and, until recent years, were able to defy the heaviest artillery that could be brought against them. The old Fort has seen the City swept by cyclones, shaken by earthquakes, devoured by fire, sacked by invaders, in the grip of pestilence, and, finally, in the possession of a foreign people. Strangest fortune of all, its subterranean dungeons have been condemned to desuetude.

OLD MANILA UNSANITARY, LIKE MOST SPANISH CITIES.

Manila Intramuros is occupied mainly by the old government buildings and those belonging to the monastic orders. In the shadows of these, huddle miserable native hovels in dense disorder. The streets, laid out at right angles, are wide enough for

the requirements of the moderate traffic, but the sidewalks, overhung by the upper stories of the houses, are inconveniently narrow.

Old Manila has always been a fearfully unsanitary place. It has never had any kind of sewerage system. A description of the private arrangements of residences is not fit to print. The drainage of houses passed into the river, the streets, and the moat. The moat long since became such a sink of fetid refuse that it was rightfully decided that to disturb it would be to court an outbreak of pestilence. The American administration is disposing of this long-standing menace to health by filling it up and converting it into flower beds.

The walls of the City, which were erected in the time of Governor Dasmarinas, are more than two miles in extent. Along the ramparts are mediaeval cannon, that long since ceased to be of any value, save as curiosities. There are eight gates with drawbridges and portcullises. Until 1854 the gates were closed at eleven o'clock every night, when the clumsy drawbridges were raised.

Manila Intramuros presents the most perfect type extant of the old-time Walled City. The walls long ago ceased to serve any useful purpose, whilst they have deprived the inhabitants of much-needed fresh air. However, perhaps antiquarian motives should be sufficiently strong to preserve these old relics of Spanish sovereignty, which were constructed in 1590

upon the site selected by Lopez de Legaspi. There is the most striking contrast between old and new Manila. The former suggests a drowsy and decrepit grandsire persisting in the garb and habits of his youth. It has no business, aside from a few retail shops; no places of amusement, comparatively few residences, and nothing of the life and bustle of the modern City.

BINONDO, THE BUSINESS QUARTER.

Binondo, which lies on the right bank of the Pasig, exactly opposite the Walled City, is the business quarter. Here the streets are alive with hurrying vehicles and more leisurely humanity. The chief business street is the Escolta, whose shops compare favorably with those of other Eastern cities. The majority of owners are Europeans, Americans, or *mestizos*. The Chinese shops, which are rarely patronized by the white population, are in the Rosario. They are small, insignificant-looking places, but many of the proprietors are said to be extremely wealthy.

During the old *régime* what signs of enterprise could be seen in Manila were limited to this side of the river. The Spanish official, whose stay was uncertain, and seldom extended over more than a few years, displayed no interest in improvements, and hardly an ordinary regard for his own comfort. His sole idea was to accumulate as much money as possible and to return to the "peninsula." The foreign

merchants, on the other hand, many of whom have been in the country for from ten to twenty years, encourage measures for public benefit and the improvement of the City, build for themselves handsome houses and beautify their surroundings.

Cigar-making is the principal manufacturing industry of the City. Some of the factories are very large and employ two thousand and more workers. There are in Manila twenty thousand cigarmakers, ninety per cent. of whom are women and girls, and a large proportion of these *mestizas* of Chinese extraction.

The public vehicles are of three classes. The conveyance patronized by the whites, and the well-to-do *mestizos* is the *carruage*, on the Victoria pattern and drawn by two ponies. The *quelis* is a small, square box-like vehicle on two wheels with seats inside for four passengers. It does not require much room, and has a commendable facility for dodging through crowded thoroughfares. The *caremata* is the native conveyance. It is merely a frame with a low rail round it and board seats along the sides, but its carrying capacity is only limited by its superficial area. The driver sits upon the forward edge, or squats inside, with his fares.

Before the American occupation a one-horse tramway, with cars of the "bobtail" variety, was the sole means of "rapid" transportation through the most frequented sections. An up-to-date electric street

railway has taken its place and bids fair to put most of the hack-drivers out of business.

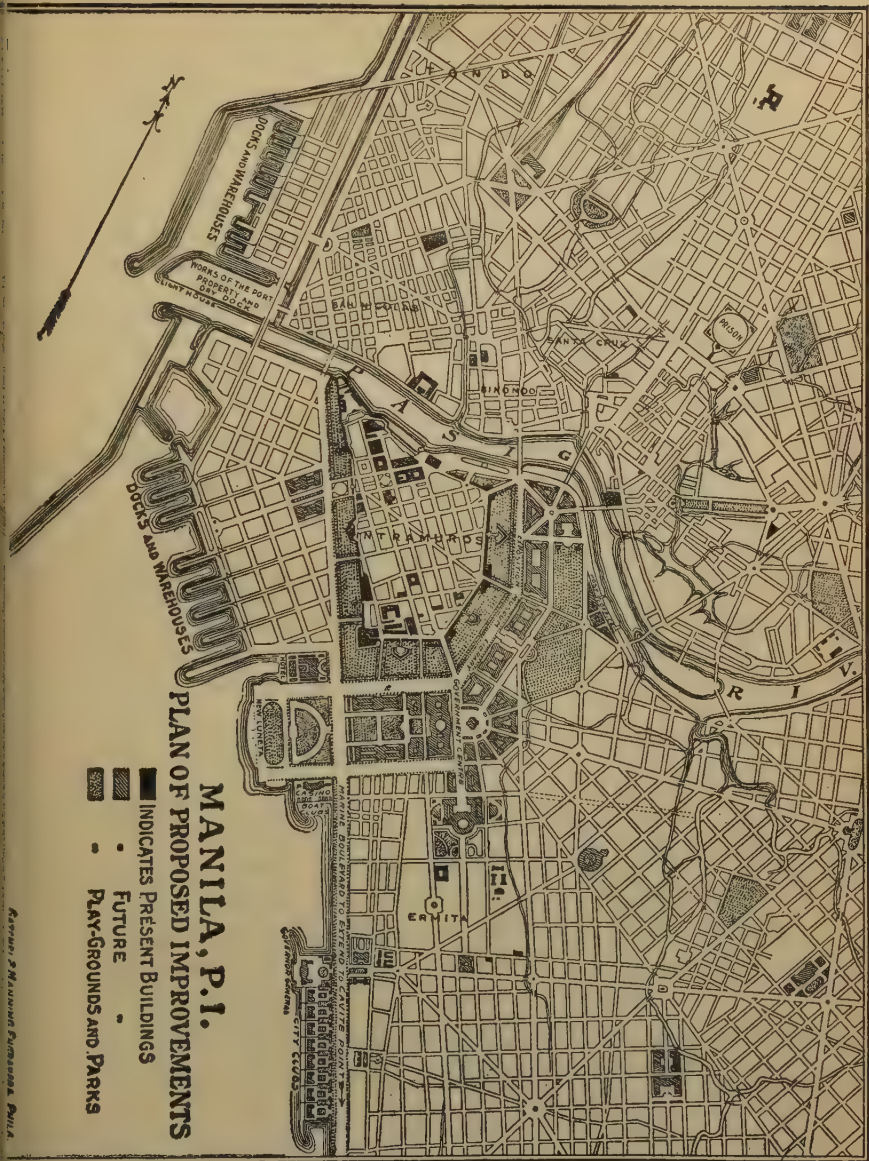
COSTUMES OF THE CITIZENS.

The whites wear the usual costume of the tropics, consisting of a suit of white duck, or linen, with jacket buttoning to the throat and a pith helmet or Terai hat.

Some natives, and many *mestizos*, dress in a similar manner, but their garb in general is limited to a pair of trousers, often rolled up to the knees, and a shirt *tout exposé*. A derby hat is a common addition.

The *mestiza*, and better class of native women, affect a rather stiff, but not altogether unbecoming, attire. Over a chemise is worn a thin and transparent *camisa*, open at the neck and with voluminous sleeves, flowing loose from the shoulders. Over this a stiff kerchief is fastened. The skirt is usually colored and patterned, with a long train. On the street the *tapis*, a piece of dark glossy cloth, is wrapped around the limbs from the waist to the knees. The materials are more or less expensive, *piña* being used by those who can afford it. Upon the feet slippers are worn. The hair is drawn back from the forehead and knotted Japanese fashion, or allowed to fall loose. It is always well kept and generally very long and beautiful.

The native children are almost invariably bare-



legged and bareheaded, with the occasional exception of some enterprising urchin who has managed to acquire the cast-off headgear of a European and wears it with uncomfortable pride. The boys wear short white cotton breeches and a shirt of the same material. The tails of the Filipino shirt are always left free to the breeze. The girls have long skirts, knot their hair, and look like their mothers in miniature.

The Chinaman adheres to the costume of his native land, but his women—and he may have one or more native concubines in addition to a wife of his race—usually adopt the Filipino dress. The Chinaman is almost invariably a good father to his half-breed children. They are well taken care of, are initiated into the father's business, or taught some other, and both girls and boys, with few exceptions, get along comfortably in after life.

VARIOUS RACES IN THE METROPOLIS.

By far the majority of Chinese in Manila are coolies, and it is safe to say that they are the most hard-working class in the community. The mechanical industries are mainly in the hands of these remarkably adaptable people, who can apply themselves to any work, however unaccustomed, and do it remarkably well. It is questionable whether any people in the world can compete with the Mongol in manual labor, and the Filipino is certainly no

match for him. The Chinaman is capable of working sixteen hours in the day continuously, and his intelligence is of a higher order than is generally suspected. But for the repressive measures that have always been in force in the Philippines the Chinese would have practically owned the country years ago.

The Spanish half-breeds are a numerous and influential class. They are the intellectual superiors of the full-blooded natives, and have the advantage of them in the matter of education. Many of these *mestizos* are well-to-do and some of them wealthy. When their circumstances will permit they are accustomed to send their sons to college in Europe, where they almost invariably prove apt pupils.

The *mestizos* act as middlemen between the planters and the European representatives of the export houses, and in this capacity accumulate a great deal of money. Upon them the larger cultivators depend for the capital with which to carry on their operations. The planter always pays an exorbitant rate for his loans, sometimes as much as fifty per cent.

These half-breeds, like all Eurasians, occupy an equivocal position in the community. They are constantly striving to disassociate themselves from their native connections and to secure the consideration enjoyed by the superior race. Everywhere in the East the Eurasian displays the same petty traits of sycophancy, querulous discontent, disingenuousness, and inordinate conceit. If this element does not

prove troublesome to the American administration it will only be because the recognition accorded to them is flattering to their self-esteem and because of a realization that under a native government their lot would be a less happy one.

THE SUBURBAN RESIDENTIAL SECTIONS.

The white population live for the most part in the attractive sections of Ermita and Malate, along the sea-front, south of the Walled City, and in San Miguel on the northern bank of the River. The last-named suburb, which is reached by the Ayala Bridge, contains several very handsome houses standing in attractive gardens. The lower of the two stories of residences is much more solidly constructed than the upper. All the living rooms are above, the ground floor being given over to servants' quarters, store-rooms, and similar purposes. The outer walls of the second story are fitted with sliding frames, in which are set small squares of translucent oyster shell, the common substitute for glass in Manila. This arrangement permits of the interior of the house being thrown wide open to the air in the evening. Plaster is dispensed with for the same reason that prohibits the use of glass. The walls are white-washed and the ceiling is of canvas. Hardwood is employed for beams, posts, floors, and the rest, and carpets and upholstery are conspicuous by their absence.

Life in Manila is very much like that in an East Indian city, Calcutta, for instance. The business of the day over, the entire white population repairs to the Luneta, which is to Manila what the Esplanade is to Calcutta, or the Marina to Madras. Upon an oval grass promenade the band plays every evening, whilst carriages circle round in one direction, the Governor-General and Archbishop only, having been allowed to drive in the other. Everyone owns a private Victoria or barouche, to which two of the country horses are driven. Many of the turnouts with their liveried *cocheros* are quite smart.

There are few public amusements, and those not of a very high order. There is plenty of good music. The Filipino has his full share of the universal Malay taste in this direction, but his talent rarely rises above mediocre. However, native bands and orchestras give excellent renderings of marches and dance music, which generally answer all the demands of their audiences.

Bull-fights and combats between various "wild" beasts used to be given, but they were generally *fiascos* on account of the lack of combative qualities displayed by the brutes engaged in them. There is a jockey club in the City, which holds meetings twice a year, members only being permitted to ride.

The Philippine "pony" is in reality an undersized horse, for in no respect, but its height, does it resemble the pony breed. These animals are said to be

derived from Mexican horses, introduced by the Spaniards in the sixteenth century. They are good-looking beasts, remarkably strong, and, with training, capable of developing great speed. It is claimed that the mile has been done in two minutes and ten seconds on the Santa Mesa race-course by a native pony carrying one hundred and fifty pounds.

COCK-FIGHTING THE NATIONAL SPORT.

The national sport of the Filipinos is cock-fighting. There are in and about Manila upwards of one hundred buildings containing cockpits, some of them capable of holding more than five thousand people, and every *barrio* in the provinces has its arena.

Aside from the sport, cock-fighting affords a convenient medium for gratifying the Filipino passion for gambling. Every native owns a bird, which he carries about with him tucked under his arm or perched upon his shoulder. It is no uncommon thing for two men meeting, thus provided for a fight, to squat in the roadway and set their champions at each other.

This pastime was under government regulation. Sundays and feast days, and in Manila Thursdays besides, were the legalized occasions for gallinacean combats. At these times every native who can command the price of admission betakes him to the nearest cockpit, and if he has the wherewithal to make a wager he is a happy man. The licenses for conduct-

ing cock-fights produced a considerable revenue to the Spanish Government, which derived income from various other forms of gambling. The privilege for a certain section was put up to the highest bidder, who had the right to prevent any one else from engaging in the business within the limits of the district assigned to him.

The building containing the pit is surrounded by a high wall or fence, forming a courtyard in which the birds are kept awaiting their turns to fight. Within, the arena is surrounded by circular tiers of seats. The owners of the contending cocks bring them into the ring and display them, each armed with a single long steel spur sharpened to a razor-edge. Whilst the birds are thus being subjected to the inspection and criticism of the spectators bookmakers are circulating about taking bets. Although the individual wagers seldom exceed a few dollars, large sums in the aggregate frequently change hands on the results of these flukey fights.

The contest is usually over in two or three minutes, for one or other of the birds is likely to be quickly killed or disabled, or to turn tail, which is recognized as the most ignominious defeat. During the set-to the spectators maintain the utmost silence save for muttered exclamations at some critical moment. Their craned necks and tense expression proclaim the keen excitement, to which they give vent in shouts when a decision is announced. As bets

are settled immediately after each event and all the currency is coin, the hubbub at the termination of a bout is pleasingly toned down by the musical jingle of money.

Chance seems to be by far the most important factor in these cock-fights, although that opinion is not generally entertained by the natives. The first blow, if it happens to fall on the head or neck, is calculated to place the recipient *hors de combat*. Of course a quick and plucky game fowl is likely to beat an opponent that lacks these qualities, but luck on the other side may easily bring about a contrary result. There is no denying that the Filipino loves his game-cock, but perhaps it is exaggeration to assert, as has often been done, that it holds the first place in his affections, and that in case of his dwelling taking fire he will convey his prized bird to a place of safety before looking after his wife and children.

THE REFORMATION OF MANILA.

Manila is rapidly undergoing transformation. Intramuros defies any great changes in its condition, and, beyond relieving its unsanitary state, perhaps little can be done to it, but the modern City is in course of complete reformation. The traveler experiences it before he has cleared the custom house, and evidences of it present themselves at every turn in the streets.

During 1904 nearly four millions were expended

in local improvements by the Government, not to mention the large sums invested by corporations in enterprises of public utility. Twenty-five miles of streets have been widened and paved, macadamized roads have been laid to all the suburbs. Thirty-five miles of electric railroad are in operation, and ten more will shortly be added. Many handsome public buildings have been erected, and others are in process of construction. Amongst these are a number of model school-houses, the first of the kind to be erected in the East. A special commission of American architects visited the Philippines in the Spring of 1905 for the purpose of planning a system of parks, boulevards, and government edifices which, when completed, will make Manila one of the most beautiful cities in the world.*

An extensive system of sewerage, sufficient for double the present population of two hundred and twenty thousand, is now being laid at an expense of over three million dollars. The accumulated filth of centuries has been removed, and the streets are

* The Commission, which was composed of Messrs. D. H. Burnham and Peirce Anderson, also planned the proposed city of Baguio, in the mountains of Benguet. It is very much regretted that the drawings of these plans, for which the writer is indebted to the courtesy of Mr. Burnham, could not be reproduced without a loss of detail, which would have marred the effect. The portion of the plan of Manila showing the improvements on the water front has been redrawn.

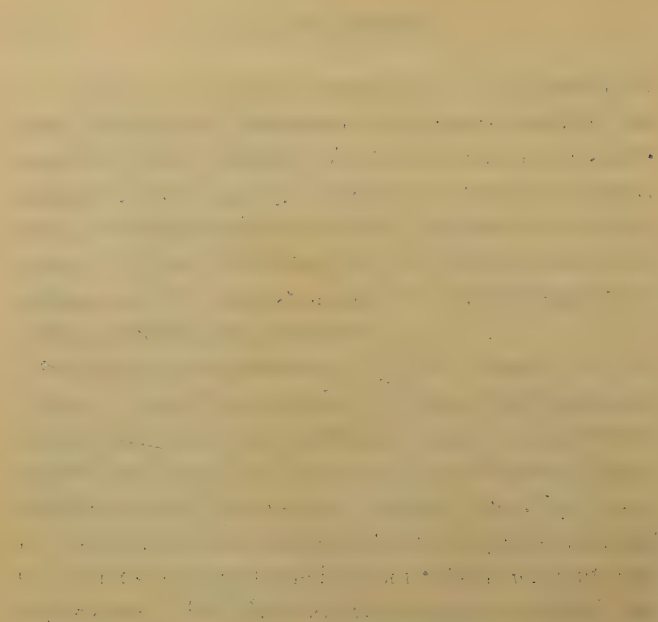
now cleaned with daily regularity. The result of these measures of sanitation is already seen in the recorded bill of health of Manila which compares favorably with that of large cities the world over, and is better than that of large centres on the continent of Asia. Crematories for the destruction of garbage are in operation, and the water supply is being enlarged and improved.

Manila's fire department is the wonder of the Orient. Even the Japanese, who have for years considered that they had nothing to learn in their own quarter of the globe, send their fire officials over to Manila to study the system. Formerly the City was at the mercy of a few antiquated hand engines, manned by natives and captained by an officer without any experience. The Insular Government secured the services of Chief Bonner, of New York, and furnished him liberally with the most modern equipment. Now the alarm of a fire in Manila is responded to with the snap and vim customary in an American city.

Manila presents the unique spectacle of white men working with unimpaired energy in the tropics to convert a sloth-ridden city into a model for all the governments of the East.

THE COMMERCIAL DESTINY OF MANILA.

These efforts, tending to promote the health, education and material betterment of the people, are not



PRIMITIVE TRANSPORTATION.

The new order of things and the old exist side by side. In sight of telephone wires, electric lights, and street-railway tracks the native rides his carabao on one of the principal streets of Manila.

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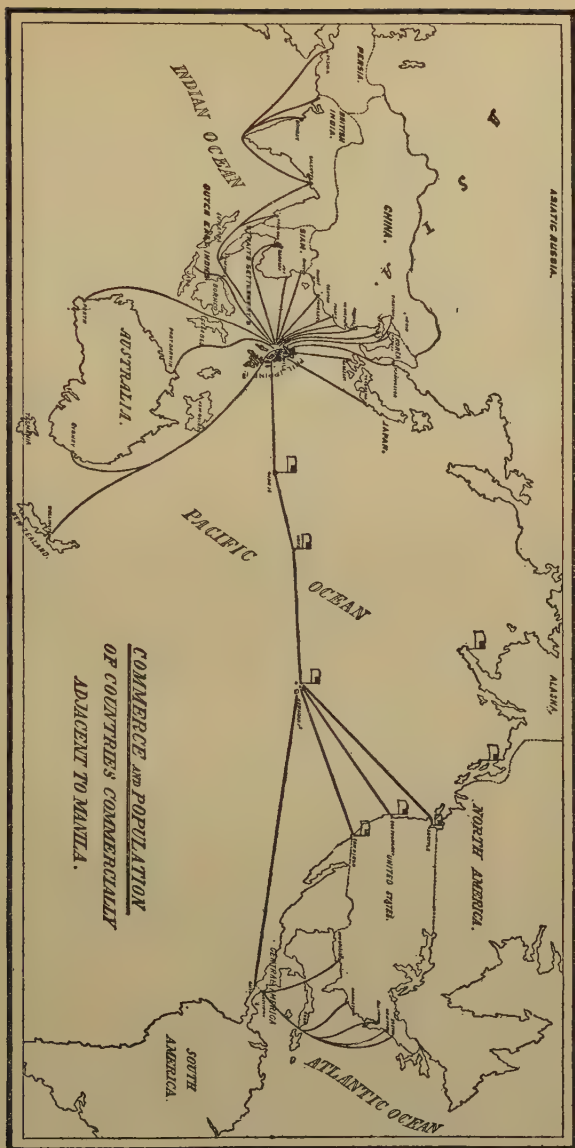
inconsistent with the view that in its commercial possibilities lies the chief importance of the Archipelago. Indeed, no factor is more surely calculated to further the humanitarian projects of the administration than the development of internal industries and the expansion of the trade of the islands. Manila occupies a commanding position with reference to the traffic of the mainland of Asia, the Malay Peninsula, and the islands of Indonesia. With the opening of the Panama Canal, the trade route between the Atlantic ports of America and Oriental points will be entirely changed and much of the freight which is now borne from Europe by way of the Suez Canal and the Cape to the same destinations may be expected to take the Pacific course, not solely from motives of economy, but also because the present route through the Indian Ocean, the Strait of Malacca, and the China Sea, entails great difficulties and dangers of navigation at certain seasons of the year. Under such conditions much, if not most, of the collecting and distributing trade of Hongkong would naturally accrue to Manila, which would then lie in the main route of Eurasian traffic.

Within easy reach of the Philippines is more than half of the people of the globe. China has a population of 400,000,000; the East Indies, including the possessions of Great Britain, France, and Holland, approximate 350,000,000; Japan has 42,000,000; Australasia, 5,000,000; Siam, 5,000,000, and the

Straits Settlements, 600,000, a total in excess of 800,000,000.

A great number of these people are not at present within the zones of the world's traffic, but large areas, formerly remote, are being constantly brought into trade relations with other countries by the opening up of systems of transportation. This applies with force to China, whose vast inland territory has been tapped in various directions by new railroads during recent years, whilst projects for extensions, involving several thousand miles, are either on foot, or under consideration. China is in process of commercial regeneration and her closer relations with Japan will surely give a great impetus to the development of the country.

China was the first customer of the Philippines, and has always been one of the best. She can already use more of the products of the Archipelago than she is receiving, and, with the increase of her necessities, she will find no more convenient or economical market in which to buy many of her staple commodities. Her capacity for the consumption of Philippine lumber will doubtless continue to exceed the ability to meet it. Her increasing demand for sugar will find a response from the islands. She will need coal and Manila hemp as her industries develop and, in a few years, it is probable that the Philippines will be in a position to supply her with considerable quantities of dress-stuffs and yarns. On the other hand, the



population of the Philippine Islands, as they convert ever-increasing areas of paddy-land to more profitable uses, will look to China for greater quantities of rice.

The commerce, export and import, exclusive of bullion, of the countries neighboring the Philippines, exceeds two thousand million dollars a year, about equally divided between outsend and intake. Next to Great Britain, the United States already has the largest part of this commerce.

OTHER PORTS WILL SHARE THE FORTUNES OF THE CAPITAL.

The problem confronting the islands is how to develop their resources so as to be able to secure a great share of this trade. There are ready markets near at hand, and a constant demand in these markets for many million dollars worth of raw and manufactured goods that might be produced in the Archipelago under conditions that would enable its shippers successfully to meet any competition. There will never be lack of customers for the produce when it is put upon the market. The economic principles involved in the situation are so pronouncedly in favor of the growth of the Philippines into one of the richest industrial territories in the East that such a consummation is only a matter of time.

The development of other ports will be coincident with the commercial expansion of Manila. Iloilo

is rapidly rising to the rank of a shipping centre of the first importance. With the adequate exploitation of the rich Cagayan Valley, Aparri will become a flourishing port. Before many years have passed some point on the Pacific coast of Luzon will receive a considerable proportion of the freight from the eastward and will tranship it to Manila by rail.

LUZON.

A HUMBLE HOME.

These nipa huts are exceeding cool and comfortable. Not a nail is used in their construction and the nearby forest supplies all the necessary material.

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XI.

LUZON.

Travel by Water in the Philippines—Filipino Hospitality is Inexhaustible—Home Life of the Tagals—A Filipino Wedding—The Religious Bond Not Very Strong—The Simple Life in the Philippines—The Inevitable Carabao—Some of the Characteristics of the Filipino Peasant—They Have Their Superstitions Like All People—A Typical Village Fiesta—A Planter's Home—A Never-Failing Source of Entertainment—The Principal Feature of the Feast—Native Pantomime Dances—The Moro-Moro Play.

Travel in the Philippines is quite haphazard as to its methods, but it has all the charm of variety and novelty to the native of a western clime. There is no occasion for time-tables nor for making prearrangements except of the most general character. At each point the manner of proceeding to the next will be determined by the conditions of the moment. But, despite the lack of regular lines of communication between any but the centres, the difficulty in travel to even remote parts is not so great as to deter any healthy man, and the mishaps and adventures that must always attend journeys in an undeveloped country are such as to lend zest to the undertaking.

TRAVEL BY WATER IN THE PHILIPPINES.

The physical character of Luzon makes transportation by water one of the most convenient and ready

means of getting from place to place, and the absence of roads, or the badness of them, in some sections compels the traveler to make a detour by sea, or to take to the river. In a few instances a coasting steamer will be available, but more often the native sailing craft must be resorted to, and the experience is one that should not be missed. Worcester* recites the incidents of such a voyage, which afforded him unusual opportunity of learning something of the vagaries of wind and water in these seas and of observing the remarkable seamanship of the Malay navigators.

“At half-past two we got off, with a fresh breeze blowing from the north. When we were about five miles out it suddenly veered toward the east, at the same time increasing in strength until things began to look ugly. The sky darkened and to the south of us we could see a mighty waterspout marching grandly along.

“We had a good, staunch boat, with strong bamboo outriggers, but the wind was dead abeam and the sea rising rapidly. Our men handled their craft with wonderful skill. When she began to keel over dangerously, instead of reefing sails or changing the course, they sent one of their number to windward *to sit on the outrigger*. As the wind increased in violence, a second, then a third, and, finally, a

* The Philippine Islands, Dean C. Worcester, New York, 1899.

fourth man walked out on the centre crosspiece, holding to the stays of the mainmast. Two of the crew sat astride the outrigger while the others stood close to it, keeping the boat on a fairly even keel. We should have done very well had the wind held steady, but it began to come in sudden puffs and squalls. The men watched it closely, running further out as a squall bore down on us and hurrying in when the wind slackened; but with all their remarkable skill they made an occasional miscalculation, bringing the outrigger down just in time to cut the top off a wave and send it flying inboard. The position of the men who were balancing the boat soon became precarious. One moment they were six feet above the water and the next up to their necks in it. We feared they might be washed away, but they hung on grimly with their teeth chattering.

"Our sail was old and rotten, and the strain finally proved too much for it. There came a sharp report and it burst through the middle. In five minutes it was blown to ribbons, and we were drifting at the mercy of the waves. For some time all hands bailed for dear life, but the water gained on us steadily, and it looked as if we were bound to fill and lie disabled until the outriggers were carried away, when we should inevitably go to the bottom.

"Two of the men suddenly stopped bailing and began to overhaul the cargo. To our amazement they unearthed a new sail which by chance they had

undertaken to carry over to a friend. How they managed to rig it I could never see. The boat was pitching and tossing like a mad thing, and I thought the man who climbed the mast would be thrown overboard, if indeed the mast itself did not go with him. I was too busy to pay much attention to anything but the bailing, however, for the fuller the boat got the faster she filled. It was touch-and-go business, and for a time it seemed as if we should be awash before they could get the sail up; but they won out at the finish. We all drew a long breath when at last the boat began to draw ahead again."

FILIPINO HOSPITALITY IS INEXHAUSTIBLE.

Inland, a river boat will sometimes be the most expeditious mode of conveyance, but most often the traveler finds the native pony, or cart, best adapted to his requirements. In the rains many roads are impassable except by *carabao*, and in order to cover them one may be put to riding that ungainly quadruped, as the natives commonly do.

The *tribunal*, or town hall, is designed to accommodate the wayfarer, but every Filipino who has a roof over his head and a measure of rice is a prospective host. The hospitality of the Tagal is unsurpassable and inexhaustible. The white man will find a ready welcome at the house of the *capitan*, or some well-to-do planter. In an out-of-the-way hamlet, where the people are all in modest circumstances, his

quarters may be less pretentious and his fare simple, but the one will be clean and comfortable and the other the best his peasant entertainer can afford. He comes without warning and leaves when he pleases. All that his host has, or can procure for his comfort or pleasure, are eagerly offered. The head of the establishment will cheerfully neglect his own affairs to attend to those of his guest, at whose service he places all the men, animals and material on the estate.

HOME LIFE OF THE TAGALS.

The family life of the Tagals, who predominate in Luzon, is exemplary. The man treats his wife with respect and kindness, and brings his children up in a manner that might afford a pattern to many an American father. They are obedient and civil to their elders, obliging to strangers, without anticipation of reward, and willing to do their share of any work that may be going forward. The women are industrious and perform a great deal of the labor in the fields and about the house. They prepare the meals, hull the rice, and work the looms. It may chance that the household has a helper in the form of a *catipado*, that is a young man without means, who, aspiring to the hand of one of the daughters of the family, is required, in lieu of dower, to serve his prospective father-in-law for a period, which may be as long as two or three years. Thus, courtship among

the Tagals is not the light and airy matter it is with us. On the other hand, the arrangement is not viewed by the youth in the light of a hardship, for he is constantly in the company of the young girl, and is permitted to assist her in the domestic tasks. During the term of probation the swain is very careful to give satisfaction to the father and to avoid incurring the displeasure of any member of the family, for he is liable to be dismissed otherwise, and to see another suitor take his place. The practice gives easy opportunity to a calculating and unscrupulous parent to trade on his daughter's charms, but it appears that such abuse of confidence is not frequent. The young couple sometimes force a reluctant father's hand by anticipating the privilege of matrimony, but in such case the favored youth never seeks to avoid a permanent alliance with his *inamorata*.

In the tropics puberty is reached at a period which we consider childhood, and natives of the Philippines marry early, the bride often being no more than twelve years old. The marriage ceremony is the occasion of great display and outlay, the expense frequently leaving the interested parties in debt for a year or two. The priest sets the day and exacts a generous fee, according to his idea of the means of the contracting families.

As evening approaches a procession of relatives and friends leaves the house of the bride's father for

the church, where the usual service is performed. On leaving the building a plate of coins is presented to the groom, who takes a handful and gives them to his wife, thus signifying his bestowal upon her of his worldly wealth, whatever it may be. This endowment is not, however, reciprocal, for a wife's goods remain her individual possession, and her husband cannot in any case inherit them. They accrue to the children upon the mother's death or, failing issue, revert to her parents.

The ceremony at the church is followed by a feast at the residence of the groom's father. This feast, called the *catapúsan*, or assembly of friends, is always a sumptuous affair. The relatives of both the young people are present, and all the notables of the village are invited. Of course this includes the *cura*, who is the guest of honor, no matter who else may be there.

Roast pig is an invariable feature of these banquets, but the table is loaded with everything obtainable in the form of viands, including many delicacies which the good folks can only afford to indulge in upon such extraordinary occasions. The beverages are wines and chocolate, sometimes reinforced with imported beer and European spirits. It goes without saying that cigars and cigarettes are supplied in abundance, and betel-nut, or *buyo*, is also provided. After the feast the *padre*, who is usually a man of tact, goes home or takes a nap in some secluded

corner, whilst the young people dance and give free vent to their high spirits.

The newly-married couple live with the parents of one or the other for some time, and perhaps permanently.

If the contracting families are in easy circumstances the preliminaries to a marriage include a great deal of dickering between the respective fathers on the subject of dowry before the matter can be satisfactorily arranged.

THE RELIGIOUS BOND NOT VERY STRONG.

These "children of the country" are as happy and contented as any people in the world. They take life lightly and accept its vicissitudes with admirable philosophy. They are a nation of Mark Tapleys. Nothing can disturb their equanimity seriously or for long. Even their religion, which appeals to their natural love of show and superstition, has no deep hold upon them. As Reclus says, "the Roman Catholic religion is for them little more than a succession of festive amusements. Troubling themselves little about dogma, they display extraordinary zeal in the celebration of the pompous rites of the Roman liturgy, and a great part of their existence is thus passed in the observance of practices not greatly differing from those of their primitive cult.

"A domestic altar, with the images of the Madonna and saints, successors of the ancient *anitos*, occupies

the place of honor in every household, and the humblest hamlet has its special feast, during which these sacred images, draped in embroidered silks and crowned with chaplets of flowers, are borne at the head of brilliant processions. The churches, built in the Spanish 'Jesuit' style, are similarly decorated with rich hangings, bannerols, and floral festoons, while every village has its band of musicians, who accompany the religious ceremonies with a flourish of trombones and cymbals. Actors also are frequently engaged to perform the 'mysteries' and to play comedies, in which the sacred and profane are strangely intermingled, the feast days kept in honor of the saints usually winding up with a grand display of fireworks."

INFLUENCE OF THE CURA.

The *cura*, especially if a Spaniard, is the most influential person in the district, and to him the "Capitan" applies for advice on all serious occasions. On him, more than upon troops, or any other medium, the Government depended for the submission of the converted natives. But the increasing relations with the outer world, the spread of education, the diffusion of secular literature, the dissemination of the Spanish language, all tended to bring about a new order of things, under which the Filipinos, with increased tendency to rise to European standards, were bound to gain in independence and moral freedom.

The wants of the Filipino are few and easily supplied. That he is satisfied to toil only to the extent sufficient to meet the requirements of his simple life is to us, victims of a turgescient material civilization, a crime. At least the Filipino has the ethic philosophy of the Stoics on his side. We are prone to prate about the virtue of labor, but we do not toil for the pleasure we find in it. Motive is the impelling power, and it is in the result, or its anticipation, that the pleasure lies. Love of labor is not a natural characteristic of the human, or any other species of animal, else the author of Genesis was sadly astray in his picture of the ideal condition of man and his conclusion that the greatest curse that could be inflicted upon him was the condemnation to gain his bread by the sweat of his brow.

THE SIMPLE LIFE IN THE PHILIPPINES.

The Filipino is much nearer to Nature in his mental and physical condition than ourselves, and it is absurd to judge him by our standards. Give him an adequate incentive and he will probably prove that he can work with the best of us. As a matter of fact he is very far from being the shiftless loiterer that has been depicted to us by uncultivated observers. The discerning visitor to the Philippines, who has heard so much of the slothful helplessness of the natives, will be surprised by the evidences of voluntary industry upon every hand. He will see

men, women, and children working hard and intelligently, and with the cheeriness which is never present in the sluggard. In order to follow the course of a day's labor he will have to rise with the sun, and, although he retires from the mid-day heat, he must follow the villagers into their fields again with the comparative cool of the evening.

THE INEVITABLE CARABAO.

The *carabao* is an ever-prominent object in these scenes. He is indispensable to the peasant farmer, and even with the introduction of modern methods would still remain one of the most important factors in the agricultural economy of the country. He draws the plough, and drags the cart, and renders himself useful in many other ways.

The *carabao*, or water-buffalo, is an amphibious animal. In his wild state he spends at least half his time in the water, and in domesticity the inclination to do so remains, although the opportunity is curtailed. However, a considerable amount of indulgence in this direction is necessary to his health. A *carabao* will stand motionless in the water for hours, if undisturbed, with just the tip of his nose protruding. This placid enjoyment is varied by nuzzling in the soft bottom for certain tender roots and grass that appeal to his appetite. In this subaqueous search he can keep his head below the surface for two or three minutes. A mud-bath he must

have once a day, and he will take one as often as chance favors. He will lie down in the sticky substance and roll about ponderously until his body is entirely covered with it. There is a distinct method in this apparent madness, for Nature furnishes the adult *carabao* with little more hair than she gives to the new-born human baby, and the quadruped would be the easiest of prey to stinging insects but for the coat of clay with which he makes up for his natural deficiency.

The *carabao* is a nondescript beast. He has a head nearly as slim as that of an antelope, with horns that lie back along his neck. His trunk is almost as bulky as that of a hippopotamus and is supported by disproportionately-slender legs. His appearance is absurdly stupid, as he solemnly wags his head from side to side and looks upon the world with the indifferent and inane expression of a Chinese idol. The *carabao* is the family pet, and so docile are these creatures in a domestic state that they learn the voices of their masters and other members of the household and come to their call or act in answer to their command. The children ride upon their broad backs, often two or three at a time, and guide them with the string attached to the nose.

The never-absent companion of the *carabao* in the field is a small black bird of the martin species, which perches upon the beast's head and picks from its ears vermin that gather there. The writer has noticed

this bird-and-beast combination everywhere in the East that the water-buffalo is found. Following the animal in his progress through the tilth is usually a procession of four or five white herons which find an easily-provided meal in the insects that are turned up with the soil.

It may readily be understood what a terrible affliction was the rinderpest that overtook these useful animals all over the country and in 1902 killed forty per cent. of them. In many cases the peasant was deprived at once of his chief possession and of a creature for which he entertained a warm affection.

SOME OF THE CHARACTERISTICS OF THE FILIPINO PEASANT.

The Filipino is naturally humane. He almost invariably treats lower animals well. The hack-drivers of Manila would seem to form an exception to this rule, but it is highly probable that their occasional harshness toward their horses is mainly due to ignorance of their nature and the consequent lack of understanding between the two. The native knows the *carabao* as the priest knows the written page, but a similar intimacy between the Filipino and the horse has never been established, because there has been no opportunity for it.

There is little real vice in the composition of the uncontaminated native, and his faults are of an easily condonable nature.

The Filipino displays in a marked degree that cardinal virtue, cleanliness, the lack of which is so often the chief barrier between the Oriental and the white man. Every *barrio* has facilities for bathing, and on feast days, when labor is forbidden by the Church, the entire community—men, women and children—disport themselves in the water. There is no separation of the sexes, but the adults are becomingly clad.

No characteristic of the Tagal is more prominently evinced than the love of music, which is universal. Every parish has its brass band, and sometimes, in addition, an orchestra of stringed instruments. They furnish the music for church services and give performances which are an endless source of entertainment to the villagers. It is safe to say that a people who have this taste so strikingly developed must possess better than average dispositions. In the most out-of-the-way and unlikely places are heard the strains of a flute, a violin, or a piano, and the labors of the field-workers are often lightened by musical accompaniment. It is a remarkable thing that amongst so many creditable performers so few attain to a high degree of ability, but perhaps that is entirely due to the limited opportunities for education, and with increased facilities for cultivating their musical talent the Filipinos may give the world some *virtuosi* of renown and produce their Paderewskis and their Paganinis.

The Tagal has the Lepcha's love of Nature in all her manifestations, and, like the hillman of the Himalayas, he has a vast knowledge of the habits and conditions of birds, beasts, and reptiles.

THEY HAVE THEIR SUPERSTITIONS LIKE ALL PEOPLE.

The Tagalogs entertain a number of strange superstitions, from which the better educated of their number are by no means free. Belief in the amulet called *antin-antin* is widespread, but the more enlightened find a satisfactory substitute in the scapulary. A native bent on gambling, or upon his way to the cock-pit with his bird, will turn back should he happen to encounter a funeral party. The "*nono*" are the spirits of old persons. When a tree is to be felled, or a piece of virgin ground broken, and on many other occasions, permission is asked of the *nono*. Should this precaution be neglected misfortune will surely ensue. The "*tigbolan*" is a ghost which assumes a variety of forms, and sometimes confers a similar gift upon certain favored individuals, in much the same way as the devil was wont to grant extraordinary powers to a few of our adventuresome forefathers. The "*asuan*" is particularly dreaded by women, for its practice is to haunt the dwellings of the pregnant with sinister intent. The "*patianac*" is the restless soul of a child that died unbaptized. It frequents the woods and chirps like a bird. The "*mangcuculan*" is a person possessing the power of

causing sickness, or death, to one with whom he or she is displeased. An individual enjoying the reputation of being a *mangcuculan* is not pursued with social attentions, but is treated with the utmost deference by everyone. The "*iqui*" is a man who has the power of flying through the air at night, leaving the lower half of his body at home. He is believed to live upon a diet of human livers. In his nocturnal journeys in search of food he alights upon the roofs of houses and, with an endless thread-like tongue, penetrates the bowels of his victim and causes his death.

There are many superstitions connected with the erection of a house. No holes may be dug for posts unless they be inserted before vespers of the same day, for the hole is typical of the grave, and if it were to be left unfilled there would be serious danger of some member of the family dying before morning. However, the danger may be averted by inserting some temporary substitute for the post in the hole. The first post set has at its base a silver coin, which will insure the owner of the house always having money, and so on throughout the details of the work.

Of course there are many curious beliefs connected with the different agricultural processes. The harvest of rice must not be gathered unless the moon is in its first or last stage, and many a native will conform to this prohibition at the risk of losing his crop. In order to secure immunity from the ravages of birds

and insects, the farmer goes into the field at midnight, preceding the day of planting, and carefully buries a handful of seed at the foot of a cross which is placed in the centre of the land. After the rice has been reaped the owner of the land takes the smallest basket he possesses and deposits in it a small sheaf of the grain. This act tends to the success of the final processes, but to be efficacious it must be performed when the tide is at its highest.

Patriotism in the broadest sense cannot be expected of a man who is utterly ignorant of the world beyond a radius of a few miles from his native village, and who has, perhaps, but the vaguest idea of what the "Philippines" signifies, but the Tagal is strongly attached to the soil and the *barrio* in which he was born. Nowhere are community bonds happier or closer. The inhabitants of a village have the same church and the same fatherly guide and adviser; they share their pleasures and their labors; the misfortunes of one are those of the others; a discordant element rarely disturbs the peaceful round of their lives. They are seen at their best on the occasion of a *fiesta*, and no more true and vivid picture of village life in the Philippines can be found than the following quotation from the pen of Ramon Lala, himself a native:*

* The Philippine Islands. Ramon Reyes Lala, New York, 1899.

Nothing in the life of the people of the Philippines is more interesting to the foreigner than the village feasts; nothing is more indicative of the character of the people, who are exceedingly fond of ornament and display. Every village has its own feasts, to which all the natives in the surrounding district contribute—in which all alike take part.

A TYPICAL VILLAGE FIESTA.

These feasts are always of a religious character, and are encouraged by the clergy, who find them not only lucrative but also conducive to religious feeling.

Come with me and visit the busy morning scene of a *fiesta* in a populous village near the capital. As we enter the broad roadway, winding with serpentine folds, among the gleaming bungalows we see everywhere signs of unusual activity; groups of smiling natives, dressed in their Sunday best, hurry by chattering gaily. Here comes a long line of *carromatas* drawn by wiry ponies, driven by well-to-do planters; with the lofty consciousness of worldly prosperity they sit erect in imperturbable dignity.

We join a passing group and follow them past the low, airy houses, all decorated now with gorgeous bunting and gay festoons. Flags and streamers flutter on every housetop; the whole village presents a scene of picturesque animation; for the tropical luxuriance of the trees and the myriad flowers of gorgeous hue form a brilliant background.

We arrive at the village green and here stands a motley assemblage constantly reinforced by the throngs that come in by every path and roadway. An expression of eager anticipation is on the faces of all as they gaze in the direction of the little church that fronts the crowded court. The church is a low, massive, white building, with large pillars in front that give it a semi-classic appearance; it forms a curious, but not uninteresting, contrast to the many-gabled bungalows. The bells in the *campanile* begin to toll slowly and from the midst of the crowd instantly comes a burst of glorious music. The village band stationed there renders effectively an operatic air as the natives slowly enter the church. After all are seated the priest preaches a short sermon, full of pith and pertinent suggestion about the saint whom the day commemorates. The audience is then dismissed with a benediction; and to the lively music of some composer it files leisurely out. The natives see nothing incongruous in the introduction of operatic music into divine worship. They are moved in devotion no less by the stirring strains of one of Sousa's marches, or a languorous waltz of Strauss, than by the solemn *Te Deum* of the Catholic ritual. To them all music is divine.

We stop a few minutes to watch the *cura*—the parish priest—as he dispenses blessings to his devout parishioners, who now crowd round him with every appearance of reverential affection. Our friend, the

cura, is a veritable father to his people. As he listens to the ingenuous confidences of his flock his face beams with that rare benevolence born of goodness; there is a whisper of domestic sorrow that he needs must hear; a story of happiness, or a tale of wrong. For each and all he has a word of kindly affection, and as he sees us waiting near the entrance he approaches with outstretched hand and invites us to the grand procession in the evening.

The people have dispersed and have returned to their homes. Already the sun is high in the sky, pouring a deluge of heat upon the landscape. From the horizon mountain after mountain springs airily into the heavens, their blue peaks suggesting a place of perpetual coolness, upon which the eye loves to linger amid the oppressive blaze of the tropic sun.

A PLANTER'S HOME.

Surrounding the village are forests of majestic trees of indescribable grandeur and of unparalleled magnificence. Among these the white houses of the planters nestle peacefully.

Each house has its own tiny garden, fenced in with reeds, and forms a miniature paradise, where are flowers of splendid hue, creepers with purple blossoms, red-coral blooms, and trees of palm, mango, orange, *lanzon*, *santol*, and giant bananas whose rich fruits in great clusters tempt the eye of the beholder. Here the native is a petty king; for his own little do-

main for nine months in the year yields sufficient for his wants. Nature indeed gives him a golden harvest for only the reaping.

We have been invited to spend the day with a well-to-do planter who, at the conclusion of the service, has sought us out. He lives on the outskirts of the village, and we are soon with him in his *carromata* speeding over the highway.

We approach his home—a typical native dwelling; the body of the house is raised about six feet from the ground, and is mounted on thick pieces of stone. This allows the air to circulate freely beneath and prevents the entrance of snakes and insects, and is in every way conducive to health and comfort. We mount the wide stairway that connects the house with the ground and enter upon a broad open piazza facing the street, called a *cahida*. The sides of this are formed of sliding windows composed of small square panes of mother-of-pearl, opaque to the heat, but admitting the rays of light. Here we are introduced to the various members of the family, who receive us kindly and offer sugared dainties and a cigarette. Beyond is a large room with walls of window and with sliding doors. Here are some chairs and a table covered with a handsome embroidered cloth. Upon the walls, which are covered with cloth instead of plaster, are various bric-a-brac artistically arranged upon scrolls, while several engravings of religious subjects and one or two family portraits hang between.

From the centre of the ceiling hangs a crystal chandelier with globes of colored glass; a small oratory, supporting the brazen image of some saint, stands in the corner. The broad floor-planks, daily scrubbed and polished with plantain leaves, are as smooth and clean as a mirror.

Opening from this main room are several smaller rooms, used as bedrooms. A narrow passageway leads to the bathroom and to the kitchen—in a separate building. The design of the whole domicile seems to aim at cleanliness and coolness—both essentials of comfort in this hot, moist climate.

The roof is thatched with *nipa* palm and the outside walls of bamboo—painted white and striped with green and blue—are covered with grotesque carvings. This, with the broad eaves and the wide balconies, gives the house a most picturesque appearance.

We note with gratification the many signs of family affection around us. The father, kind and considerate; the mother, sweet and sympathetic; the children, quiet, obedient, and well-behaved—a picture of domestic happiness that is representative rather than exceptional. After tiffin, each retires to his own room to enjoy the *siesta*; and thus we sleep soundly through the heavy afternoon hours.

The *siesta* over, we venture into the village. Through the streets are hurrying scores of men, nearly every one with a cock under his arm; they are going to the cock-pit. We follow and soon we come to our destination.

Imagine a large bamboo building with a thatched roof wherein hundreds of natives have gathered for what is to them the supreme enjoyment of life. Around the door are one or two guards in Spanish uniform; but everything appears so decorous and orderly that it is indeed difficult to realize that we are in a gigantic gambling den. Nearly every native has with him his fighting-cock, which he loves as devotedly as one of his own children and upon which he has spent much care and attention.

The "farmer," often a Chinaman, who has secured a license from the Government to run a cock-pit, stands in the middle of the ring, around him a group of natives, excited and eager.

Two fighting-cocks, each armed with a spur three or four inches long, are in the hands of their respective owners. Every eye is riveted upon the respective contestants. The farmer, or proprietor, announces that the contest is about to begin, and from every hand dollars rain into the ring, each person staking a certain amount upon his favorite.

This done, all is breathless expectation, and at the word "*Casada!*" meaning matched, and at "*Largo!*"—Let go!—the fowls are let loose. The fight waxes hot and furious; the two cocks are as pugnacious as bull-pups. But it is soon over; for at a well-directed thrust from the steel spur one of the contestants lies dead.

The crier now announces the name of the victor,

and all the winners come down into the middle of the ring and pick up their own stakes as well as the amount won by the wager.

Strangers often remark how unusual it is that amidst so much confusion and where is apparently boundless opportunity for cheating there should be so much honesty and good faith. However, every man is to be trusted. I have never known but one exception—he was instantly hacked to pieces with knives.

It is night. Against the sombre gloom of the heavens gleam millions of stars; they, too, are a part of the grand illumination that is to be the climax of the whole *fiesta*. Again the village green in front of the church. It is alive with the happy villagers decked in all their finery—the men and boys in airy colored shirts and white trousers, the women and girls in splendid skirts and brilliant chemisettes.

THE PRINCIPAL FEATURE OF THE FEAST.

All are standing bareheaded; the band is discoursing sweet music, and the people stand entranced. Not a sound is heard till the tune is ended; then on every hand arises a decorous murmur of delight. Here comes the *cura*. He at once proceeds to arrange the procession which is the event of the feast and to which the villagers have been looking forward with joyous anticipation for many months. Mysterious groups are issuing from the church; these are assigned to their respective positions by the father,

ANTIQUE DEFENSES.

A corner of the ramparts of Old Manila with the Luneta in the background. It was with these cumbersome old muzzle-loaders that Augusti proposed to knock Dewey's ships to pieces.

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who in this, as in all else, is the master of ceremonies. Let us, however, leave the crowd and move a little way up the street, where before long the procession is to pass. Over the roadway, from airy arches gaily-decorated with bunting are suspended Chinese lanterns. On the gateways to the houses, on all the fences that line the street, hang little fat pots whose pale flicker, multiplied a thousand-fold, produces a romantic effect to which the lights on the arches and the many-colored illuminated lamps in the windows add a subdued splendor.

We have not long to wait, for the procession has been speedily arranged and is already making its way up the street, the band at the head playing an operatic air.

Behind come the happy participants, two by two; men and women alternating. All carry torches whose glow throws over their grave faces a gleam of soft light that harmonizes well with the nature of the occasion.

And now comes the spangled image of some old saint borne aloft on a litter; while a murmur of applause bursts from the admiring onlookers. From every house rockets are shot into the heavens, showering on the dusky night constellations of colored stars.

Thus saint after saint, martyr after martyr, is majestically borne along till, near the end of the procession, appears the image of the Virgin herself, "decked with jewels bright and with glory crowned."

Now the murmur rises to a shout of devout acclaim; the Queen of the festive night, Our Lady, passes on.

Thus through every street winds the brilliant procession under the lighted arches returning finally to the village court whence it started. Here the priest pronounces a benediction and with a clash of triumphant music the participants are dismissed.

Again we accompany our host back to his hospitable mansion, where a generous meal has been prepared for us. We partake heartily of the good things, roast pig, chicken, many kinds of native fruits, and rice. At the close cigarettes are passed round—both men and women smoking—and we soon enter into conversation while the new arrivals are being served.

NATIVE PANTOMIME DANCES.

It is our host's grand reception night. A hundred guests have partaken of his bounty and the verandah and the sitting-room are crowded with friends and neighbors—invited and uninvited; all are equally welcome. Cigars and cigarettes are passed around, and now the fun begins. A girl—a wonderfully sweet and pretty creature, with glowing black eyes and long, loose black hair—advances to the centre of the room and croons a low, plaintive air, reminiscent of unrequited love. She accompanies her music with a wierd dance, impressive through its very simplicity. Gradually her tones

grow louder, and her movements quicker, signifying all the varying degrees of advance and refusal. Her supple body glides in a thousand graceful curves, each eloquent of beauty. Her pale, olive face becomes mantled with a rich crimson-tide as she lashes herself into a fury of passion. She feigns anger, and stamping her pretty feet, now in petulant disdain, now in a paroxysm of wrath, stands the incarnation of beautiful rage. It is a picture full of tragic power, of deep significance. She is approaching the climax of her passion. Her voice is sharp and shrill as it trembles with scorn and defiance. Forward and backward her body sways with a rhythmic swing that compels the attention of every beholder. Many in fact accompany her every motion with the sympathetic movement of unconscious imitation; their faces mirror the feelings of the dancer.

And now a note of triumph rings out, and the singer's face glows with an expression of ecstasy; while bounding forward, her splendid hair trailing in waves of ebony, she seems transformed—the apotheosis of joy. Then, slowly decreasing in volume, her voice sinks to a low whisper of serene content, and blushing modestly at the applause, she retires to give place to others.

Two young men and a girl now come forward and a scene of desperate rivalry on the part of the men and of tantalizing coquetry on the part of the maiden is enacted. This is by means of a series of intricate

dance movements, no less striking than original. A pretty tableau truly, and one not lacking in sentiment and in spontaneous expression. A foreigner would believe that these young natives were in terrible earnest and that they were rehearsing a passion of the heart. Such, indeed, is often the case, and many a girl has, through the license of this dance, shown her preference. Many a youth, too, has seen his hopes blasted and his rival exalted by a dainty *pirouette*.

THE MORO-MORO PLAY.

Dance after dance follows, and it is getting late. But another entertainment is in store for us, and so once more we venture forth into the night *en route* to the village green.

Here has been erected a large booth, around which hundreds of natives are standing, in attitudes of profound attention. A *moro-moro* play is going on. This is a sort of Philippine miracle-play, in which kings, and queens, and soldiers, and various personages with Biblical names, contend together. There is rivalry, ruin, and despair; there is death, murder, and awful retribution. It is a tumultuous tragedy, in which, too, are some subtle and refined elements and a kind of gross humor, represented by the stage fool and the lads that take the female parts. There is, however, no coarseness—not a suggestion of it. Love and religious persuasion and devotion mark the greatest number of *moro-moro* performances, and

while some of the plays are fairly good—not judging from too lofty a standpoint—yet, on the other hand, it is indeed amusing to note how little in this line, how thin a texture, pleases the people; bombast and fury, honeyed accents and unnecessary vicarious suffering, false and flagrant violations of dramatic art—all alike are viewed with breathless interest and applauded or stoically witnessed as the occasion demands. The entire play is given in the Tagal language.

The native spectators, indeed, enter into the action of the play with, as it were, a grim earnest, as if all their mental faculties were judging complex emotions and nice situations. Nothing, indeed, in the native character is more remarkable than its unvarying decorum. Here the happy crowd has been standing for three hours agape with delight, drinking in the rude splendors of tinsel potentates. Here, too, they would be willing to stand for several hours longer, but it is nearly midnight and a sudden illumination on the other side of the square announces that the time for departure is nearly at hand.

It is seen that the villagers have constructed a miniature castle now ablaze with fireworks. Various designs are traced by the spreading glow, and scores of rockets shoot into the sky, dropping a shower of brilliant stars. Ever and anon, at some unusual display, a murmur of applause rises from the admiring throng. Entranced, they stay until the last

rocket has been drowned in the vast ocean of night. Then all leave as silently as they came, and the village square is soon deserted, while the lamps and lanterns are allowed to burn till their glow is quenched in the brightness of the morrow's sun.

THE VISAYAS.

A MESTIZA.

The offspring of Spanish fathers and native mothers are the most intellectual and well-to-do class among the population. Their women are not behind their Cuban sisters in the qualities of grace, refinement and beauty.

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XII.

THE VISAYAS.

Characteristics of the Visayans—Iloilo, the Capital of Panay—Island of Guimaras—Iloilo Province and Its Industries—The Relapse of Mindoro into Wilderness—The Sugar Fields of Negros—The Natural Beauties of Samar—Catbalogan—The Remontados, a Reversion to a Wild Type—Masbate, a Vast Grazing Ground—Historic Cebu—The Holy Child of Cebu—Cebu as a Shipping Centre—Old Landmarks and Historic Sites—The Hardy Islanders of Bohol—The Island of Siquijor—The Fate of Delinquent Taxpayers Under Spain—Leyte.

The Visayan Islands are a very important commercial division of the Philippines. Practically all the sugar exported from the Archipelago and a large proportion of the hemp is produced in this group. There are many points of dissimilarity between the Visayans and the Tagals, and they do not consider themselves the same people, nor have they any love for each other. The Visayan is less intelligent than the Tagal and has fewer attractive qualities, but the charge of excessive indolence that is frequently brought against him appears to have less foundation than the equally serious one that he is a little too prone to indulge to excess in strong drink.

CHARACTERISTICS OF THE VISAYANS.

Foreman says: "The Visaya native's cold hospitality is much tempered with avarice or the prospects

of personal gain—quite a contrast to the Tagalog. On the first visit he might admit you to his house out of mere curiosity to know all about you—whence you came, why you travel, how much you possess, and where you are going. The basis of his estimation of a visitor is his worldly means, or if the visitor be engaged in trade his power to facilitate his host's schemes would bring him a certain measure of civility and complaisance. He is fond of and seeks the patronage of Europeans of position. In manners the Visayo is uncouth and brusque and more conceited, arrogant, self-reliant, ostentatious, and unpolished, than his northern neighbor. If remonstrated with for any fault he is quite disposed to an impertinent retort or sullen defiance.

“The women, too, are less compliant in the South than in the North, and evince an almost incredible avarice. They are excessively fond of ornament, and at feasts they appear adorned with an amount of gaudy French jewelry which, compared with their means, has cost them a lot of money to purchase from the swarm of Jew peddlers who invade the villages.

“If an European calls on a well-to-do Visayo, the women of the family saunter off in one direction and another to hide themselves in other rooms, unless the visitor be well known to the family. If met by chance, perhaps they will return a salutation, perhaps not. They seldom indulge in a smile before strangers; have no conversation; no tuition beyond music

and the lives of the Saints; and altogether impress the traveler with their insipidity of character, which chimes badly with the air of disdain which they exhibit.

“I stayed for some months in an important Visaya town, in the house of a European who was married to a native woman, and was much edified by observing the visitors from the locality. The *Señora*, who was somewhat pretentious in her social aspirations amongst her own class, occasionally came to the table to join us at our meals, but more often preferred to eat on the floor in her own bedroom, where she could follow her native custom, at her ease, of eating with her fingers.”

In the main, however, the Visayans are much like other Filipinos. There is no great difference in their customs, manner of living, superstitions and mental habits.

The interior districts of many of the Visayas are inhabited by *monteses*, mountain tribes living in varying conditions of barbarism. As a general thing they are peaceable and harmless, but they retain a few ancient customs that are apt to prove a trifle embarrassing to a stranger. It is their belief that the spirit of a person who has died amongst them will not be happy if allowed to depart in solitude to the unknown. Consequently, and in order to avoid the ill-will of the deceased, they set out immediately after he has breathed his last to find a companion for him.

This practice is, as may easily be imagined, a great check on sociability, and these people, instead of forming communities, live in isolated families, each on the *qui vive* to prevent another snatching from it an unwilling traveling companion for some deceased member.

ILOILO, THE CAPITAL OF PANAY.

Iloilo, on the Island of Panay, is the second city in importance of the Philippines, and is rapidly growing as a trade centre and a shipping point. Despite its great commerce, the city was miserably neglected under the Spanish rule. The streets, subjected to much heavy traffic, became worse than country roads and were allowed to remain in that condition. The sanitary arrangements were abominable and the lighting inadequate. The port transacted its enormous business under almost incredible difficulties. Ocean vessels could not enter the river and so were obliged to transfer their freights by means of lighters. Coasting steamers, drawing not more than thirteen feet of water, could navigate the muddy creek, but when they reached the city they found not even the most ordinary accommodations for loading and discharging cargo. There were no wharves, no cranes, not even any regular moorings. Vessels tied up where they pleased and got their stuff on or off-board as best they could. Iloilo is entering upon an era of reform as regards this and other matters.

The port has no light, although the erection of a lighthouse was commenced twenty years ago and the money for its completion has been collected by the officials three or four times over. Ever since the first stone of the structure was laid the authorities have mulcted every ship that entered the harbor for lighthouse dues.

ISLAND OF GUIMARAS.

Guimaras, an island about twelve miles square and distant but one mile from Iloilo, is a very healthy and picturesque place, enjoying a situation involving commercial possibilities that will be exploited some day. A few of the European merchants of Iloilo have residences upon the island.

The fishing industry of Guimaras is quite important, Iloilo affording a ready and convenient market for the take. Very little of the soil of the island is fertile, and on that hemp, rice, corn, and tobacco are raised. The cocoanut, however, which will flourish where nothing else may grow, is plentiful, and therein lies the future wealth of this little spot of land. The natives do not make a commercial use of the nut, but extract *tuba* from the tree which, in the absence of capital, is perhaps the most profitable purpose to which they could put it. Worcester thus describes the process of collecting the fluid: "Few nuts were allowed to ripen on the trees near our house. Many large groves produce no fruit at all. The

branches of the blossom-stalk are tied together into a compact bundle, their ends are cut off and thrust into a hollow joint of bamboo, called a *bombon*. The sap which flows abundantly from the wounds thus made is known as *tuba* and is gathered morning and night. Notches are cut in the bark of the trees as they grow taller and the *tuba*-gatherer, who is not encumbered with much clothing, puts his toes in them and climbs the stem of a lofty palm as if it were a ladder. All the palms in a grove are usually planted at one time and remain of fairly uniform height. In many instances bamboo bridges are built from tree to tree, so that it is not necessary to climb each one.

"The *tuba*-gatherer carries on his back a large joint of bamboo in which to put the fresh sap, a swab to clean the *bombon*, in which the *tuba* is caught as it flows, and a package of bitter red bark reduced to powder. This powder is thought to improve the flavor of the drink, often recommended for those who are recovering from severe illness on account of its flesh-producing properties. The fermented product is a mild intoxicant."

Guimaras would seem to be an ideal spot for the commercial cultivation of the cocoanut and the production of copra or oil. It has a pleasant climate, is in close proximity to a labor market and a port, and almost the entire coast of the island is paralleled by a fine highway, connecting a number of considerable towns.

To return to Iloilo; it is far from being an attractive place. As has been said, the streets are in the worst possible condition, especially after rain, but the visitor, unless he is fortunate enough to enjoy the use of a private vehicle, must walk, for there are no hacks. The greatest number of vehicles are bullock-carts engaged in carrying sugar between the warehouses and the river front. The public buildings were once handsome, and the public square sightly, but they have been neglected, and no interest seems to be displayed in anything that is unconnected with sugar. There are a few tolerably good shops, but the quarters of the lower class of natives have been allowed to invade every part of the town.

ILOILO PROVINCE AND ITS INDUSTRIES.

The province of Iloilo, consisting of the southern half of Panay, is the most populous in the Archipelago. In former days it exported enormous quantities of sugar, including a large portion of the Negros output, besides a considerable amount of hemp and other produce. In fact, the shipments of the port exceeded those of Manila. With the decline of the sugar industry there has been a falling off of the business, but greater attention has been paid to the cultivation of tobacco and the output has increased in quantity and quality for some years past. Visayan tobacco has such a bad name that it can find a retail market outside the group only under an alias, and the

shipments from Iloilo to the Capital are made up into the cheaper brands of "Manila" cigars, which sell at the rate of three for a cent, local currency. There is no good reason why large areas in the Visayas should not grow first-class tobacco under improved methods of cultivation.

In and about Iloilo weaving is a prominent industry and a large trade in textiles of various kinds is carried on with other islands. The commoner fabrics are made from cotton and hemp fiber, although some very fine cloths are often woven from them. However, it is in the production of the gauzy materials of *pina* and silk that the Visayan women excel. The work is all done upon hand looms, and it is an extremely slow and tedious process, some of the material having almost the delicate texture of spider's web. The finished product in bright, well-harmonized colors is strikingly beautiful. *Pina* and *jusi* fabrics are admirably adapted for summer wear in the eastern States of America, and they should come into use with our ladies. Priced by the yard, the best of these productions are rather costly, but judged as one does a Kashmir shawl, by the amount of time and labor expended upon it, they are dirt cheap.

The almost squalid aspect of the low-lying city upon its swamp-site, is somewhat relieved by the environment. The surrounding country is beautiful in the extreme. On every side the heavily-wooded land rises in gradually increasing eminences until it cul-

minates in lofty mountains in the background. Nearby are Jaro and Molo, picturesque little towns where some of the Iloilo merchants have bungalows.

LOOKOUTS FOR PIRATES.

At Jaro, the Bishop of the diocese has a summer palace and the village contains a very small, but handsome, cathedral. In the vicinity of Iloilo one may see an old-time watch-tower, such as is commonly found in or near the Visayan coast towns. These circular stone buildings, in the form of huge pepper castors, are reminders of the days when the islands were the constant scenes of Moro outrages. At such seasons as were favorable to navigation, a lookout was maintained day and night from these vantage points for the dreaded pirates, and at the first appearance of their approach the inhabitants of the town or village were warned to take to the hills. Cattle were driven off, if possible, and as much portable property as could be carried was taken along, so that if sufficient time had been allowed, there would be little left for the Moros but to fire the houses and set sail again. But if, as quite often happened, the inhabitants were taken unawares, then was their fate unhappy in the extreme, for the southern pirates knew no pity on these expeditions. The village would be sacked and the pick of the men and women would be carried into slavery, whilst the remainder would be put to the sword in sheer wanton cruelty.

In years gone by Mindoro was one of the most prosperous of the islands of the Archipelago. Large areas were cultivated by the Tagal inhabitants, who not only raised enough to furnish bountifully their own needs, but helped to supply the wants of their neighbors. Their extraordinary prosperity and success were, however, the undoing of the Mindoro islanders, whose inviting condition aroused the cupidity of the Moro pirates. Time and again the island was raided, its towns laid waste, and its able-bodied men and young women carried into captivity. At last it began to be shunned as a place accursed and its fields of grain reverted to wilderness.

THE RELAPSE OF MINDORO INTO WILDERNESS.

Mindoro is now the chief refuge of criminals from the neighboring islands who, once they gain the mountains of the interior, are able to defy pursuit. These outlaws, called *tulisanes*, were more or less troublesome in most of the northern provinces, where they formed organized bands under recognized leaders and terrorized large districts. Although these men were criminals of the worst type, many of them with murders to answer for, the Spaniards made no serious efforts to wipe them out. In fact, if the Civil Guard caught one of these *banditti* and lodged him in jail he invariably contrived to bribe his way to liberty again. So well was this known that some officers of the provincial constabulary made a practice of

disposing of such prisoners before the municipal headquarters were reached. This was contrived by giving the *tulisan* what appeared to be a good chance to escape and shooting him in his tracks before he had a fair start.

THE SUGAR FIELDS OF NEGROS.

The soil of Negros is mainly devoted to sugar cane, but a good quality of Visayan tobacco is also raised and cacao of an excellent quality. The sugar crop of the island is the only one in the Archipelago that is produced on anything approaching a scientific system. This is due to the introduction of foreign capital. The estates are not large, very few of them having a capacity in excess of one thousand tons a year. Steam and hydraulic machinery is employed on several of them, but it is not of the latest pattern, and the entire process, far in advance as it is of the agricultural methods customary in other parts of the Archipelago, is capable of considerable improvement. The great difficulty under which the planter labors is that of securing sufficient help. High rates of wages are paid; nevertheless, it frequently happens that the proprietor of a sugar estate sees his crop deteriorate because he cannot secure the hands necessary to harvest it. In many districts it is requisite to import laborers, and in all cases they demand considerable advances before they will enter upon their work. The best men are apt to leave after they have saved the trifle which is a competency to them.

Worcester relates an incident which strikingly illustrates the situation. A planter had a field hand who, after several years of service, had become almost indispensable to his master. One day he unexpectedly announced his intention of ceasing to work. To the planter's expostulations the man replied: "Senor, if you were back at your home in Andalusia living in a house as fine as any in the province; if your food and clothing were not only as good as any of your neighbors could boast, but were all that you yourself desired; if you had money enough for all present and future needs—would *you* turn your back up to a sun as hot as this and *work?*" It is needless to add that the master was at a loss for a rejoinder. The native has no incentive to work hard and long, and in the absence of it there is no reasonable ground for expecting him to do so. Whether his happiness will be increased by arousing his ambition is an open question, but it is certain that until he aspires to higher things we must not expect to see him exert himself beyond the bounds of necessity. It may be that when he learns that increase in his worldly possessions will not bring upon him burdensome taxation and heavy contribution to the Church, he may appreciate some of the at present unknown advantages of money. It is a strange economic condition, in which a planter finds his most desirable laborers amongst men who drink and gamble, because they will work harder than moral and sober natives in order to earn money to satisfy their vicious inclinations.

As a rule, the sugar planters, many of whom are Europeans, live comfortably, and some of them luxuriously. There are many handsome houses upon the plantations. They have good furniture, carriages, and horses, and are generally within easy reach of congenial neighbors. In the halcyon days of sugar, the lot of the sugar planter was the most enviable in the islands. He kept open house, stinted himself and his family in nothing, ran up to Manila once or twice a year, and sometimes returned to Spain with a sufficient fortune to enable him to live in ease for the rest of his life. It is a pleasure to think that there is hope of something like the old times returning to the planter of Negros.

THE NATURAL BEAUTIES OF SAMAR.

Samar has an area about twice as large as that of Delaware and a population nearly equal to that of the American State. The island boasts some of the finest scenery in the Archipelago, but owing to the difficulties of travel it has not been photographed to anything like the extent of less attractive sections.

So close does Samar approach to Leyte that at one point the Strait of San Juanico narrows down to five hundred yards. Despite the proximity of the mainlands the passage from one shore to the other is an extremely difficult one. The Strait is beset with numerous tiny islets, around which the rapid current eddies with dangerous effect, precluding the employ-

ment of a sailboat and taxing the skill of the canoist to the utmost. The environment is unspeakably picturesque. The bluffs along the Samar coast are pitted with low-lying caves in which have been found skeletons of human beings who were much taller and larger than any of the present inhabitants of the Archipelago. These finds have created an ethnological puzzle, for there is nothing even in the traditions of the islanders hinting at any other than the races with which we are familiar, and the aborigines were dwarfs. Had there been a temporary settlement of foreigners here, some additional traces of it should exist, and if we look for an explanation in shipwrecked adventurers it is difficult to account for their having made sepulchres of these caves. It is an interesting question.

The Basey River empties at this point, passing under a natural arch formed by two limestone rocks some forty feet in height. In front opens a portal thirty-five feet high, through which the river may be seen. In the wall on the left of an oval court thirty-seven feet above the water is the entrance to a cave which penetrates about one hundred feet inwards. Formerly this was a spacious stalactite cavern, but it is now partially destroyed by the falling in of the rocks which formed the roof. The place is named the "*Cuevas de Sojotón.*"

Another beautiful spot is within five miles of the town of Canaguaion, where the Molo River issues by

a mouth about one hundred yards wide between two high black rocks, and continues through a series of falls for a distance of one-third of a mile.

A considerable portion of Samar is cultivated in hemp, sugar, and other produce, but the greater part is forest containing the most valuable woods of the Archipelago. There are few roads, and travel and traffic are carried on by means of the streams. Every village, not immediately upon the coast, is situated upon a waterway navigable by native boats; and almost all the large amount of produce shipped from the island finds its way to the ports by boat.

CATBALOGAN.

Catbalogan, the capital, is a little town of not much more than five thousand inhabitants, and very much smaller than several other centres. It has, however, a large trade with Manila in hemp, sugar, and cocoanut. As in every commercial centre, Chinamen are prominently engaged in business and get the best of the natives at every turn.

In the vicinity of the town is raised the "*isigud*," or fruit of San Ignacio, which is known to commerce as the "Catbalogan seed." It is claimed that this vegetable is a specific in cholera and that it never fails to cure that disease. The Chinese have the greatest faith in its properties and take the entire output, which is shipped to China. Whether the efficacy of the seed has ever been put to scientific test the writer

is unable to say, but if half its alleged virtue can be established it should prove a boon to the inhabitants of Eastern countries.

THE REMONTADOS, A REVERSION TO A WILD TYPE.

The interior of Samar contains many *remontados*. These are natives, who having found the "call of the wild" irresistible, have forsaken civilization and reverted to the primitive condition of their fathers. They are not, like the *tulisanes*, criminals, but usually peaceable, fairly industrious people, who form small communities and engage in agricultural pursuits. When Christianized natives return to the mountains they generally retrograde rapidly, frequently marrying with wild tribes and lapsing into the latter's condition.

MASBATE, A VAST GRAZING GROUND.

Masbate is noted for its herds of cattle, horses, and hogs. Grazing is the chief industry, and upwards of one thousand head of cattle are shipped from the island monthly, the greater number going to Manila. The trade has thriven since the American occupation, and is capable of great extension. The system of communication is much the same as in Samar, but, if anything, more restricted. There are no roads worth mentioning, and very few trails. The animals are brought to port on the hoof and shipped alive, the refrigerator not yet being a feature of Philippine traffic.

The natives manufacture palm mats that are justly celebrated for their workmanship and the durability of their colors. They are superior to the Japanese article and deserve to find a market in America.

HISTORIC CEBU.

Cebu is, from the historical point of view, one of the most interesting places in the Archipelago. It was here that the Spaniards made their first settlement. Magellan landed on the 7th of April, 1521, at the capital of the island, occupying the site upon which the present town stands. A hut was immediately constructed and consecrated. Mass was performed in it, and the royal family, with easy indifference, submitted to baptism. It is said that Legaspi's expedition erected a church upon the exact spot where this event took place, and that the building still stands in its original form, but this is probably a fanciful claim, although rendered less unlikely by the fact that Cebu does not appear to be subject to the severe earthquake shocks that have devastated the centres of Luzon.

Less than a month after landing, Magellan met death on the little mangrove-covered coral island of Mactan, which lies a scant mile and a half off Cebu. After the loss of its leader the expedition fared badly. King Hamadar of the island treacherously murdered a number of their party at a banquet and the remainder shortly afterwards set sail on their long journey back to Spain.

In 1565 Legaspi arrived at Cebu and despite opposition contrived to pacify the inhabitants and hold his ground. A fort and other buildings were constructed, and in 1670 the place was declared a city.

THE HOLY CHILD OF CEBU.

It is recorded that a few months after Legaspi landed one of his soldiers found a wooden image of the Christ Child on the seashore. The appearance of the image was deemed miraculous, and the Austin Friars cherished it as a sacred possession. When the Spaniards took possession of the city they erected a large bamboo cross. Some years after, a fire swept through the quarter where the cross stood, but it appeared to be impervious to the flames, and in some peculiar way its preservation was attributed to the image referred to above. The cross is now exhibited in an Oratory adjacent to the Church of the Holy Child of Cebu. The first church dedicated to the mystic image was destroyed by fire, but the deity escaped injury. It is a black, unlovely-looking thing, somewhat more than a foot high, covered with silver ornaments that have been donated by the devout from time to time. It is exposed to public view at intervals, when the occasion is one of extreme pomp. Its feast is held on the 20th of January, when pilgrims from distant parts of the Archipelago come to worship at its shrine and obtain absolution for their sins.

Cebu is a port of considerable importance, with a population of about eighteen thousand. For many years it ranked next to Manila in commercial standing, but it has in recent times been overtaken and passed by Iloilo. Cebu still ships large quantities of the hemp and sugar produced by the Visayan group of islands, but its own share in the production is not commensurate. It is said that its inhabitants, whilst docile and well-disposed, are neither energetic nor enterprising.

The streets of the city are wide and straight, and it has some handsome buildings, although during the Rebellion it was bombarded by a Government vessel with dire effect.

The Episcopal Palace is a fine structure noted for its interior decorations and some unusually good paintings. The Bishop's See, which was created in the sixteenth century, included the whole of the Visayan Islands. The city was also the headquarters of a Governor, and a General, and, in the old days, the social life of the place was very different from what it now is. Here, as elsewhere in the Visayas, the wholesale business is in the hands of Europeans, the largest export houses being British. The retail stores are conducted almost exclusively by Chinamen, the few exceptions being *mestizos*. The full-blooded native has absolutely no chance in competition with these, and indeed, he seldom displays any ambition for competition. The Chinese shops

along the Lutaο at one time did a good business, and the *mestizo*-Chino section of the Parian was a flourishing trading quarter until after the bombardment of 1897.

OLD LANDMARKS AND HISTORIC SITES.

The picturesque fort named after San Vidal, the patron of the city, commanded the harbor in the days gone by and is one of the landmarks of the Archipelago best deserving preservation. There are a Cathedral and several churches, of which that of Santo Nino—the Holy Child—is the most noted and, perhaps, the most attractive. Cebu shares the general healthfulness of the island, and its surroundings add to its attraction as a place of residence. Round about is very pretty country, and a range of hills backs the town. The island has been denuded of most of its timber, but the soil is extremely fertile and capable of much more extensive cultivation than it is at present put to. The sugar raised here will compare favorably with the best production of Negros, and the Cebu corn is superior to that raised in any other part of the Archipelago. The natives substitute it for rice extensively, and this is one of the few places in the Philippines where they have learned to prefer the former.

Along the coast of the island is found the famous *Regardera de Cebu*, or Venus flower-basket, the only one of its genus. The shores are renowned for their

rare shells, which include the much-prized *Gloria Maris*. A few years ago many a splendid bargain was to be made in the villages along the littoral, but the natives are beginning to understand something of the values of their finds. Still, Cebu offers a fine hunting ground for the conchologist.

THE HARDY ISLANDERS OF BOHOL.

The native of Bohol displays a degree of energy and initiative which is rare amongst the inhabitants of the Philippines. The first uprising of consequence occurred in this island in 1622, when the people tired of the exactions of the State and the tyranny of the Church. It was put down by troops from Cebu, but in 1744 similar causes led to another revolt, which was followed by a condition of practical independence on the part of the Bohol islanders for a period of thirty-five years.

The people of Bohol are famous for their courage and the expert use of their favorite weapon, the lance. The Moros learned to respect their skill and prowess, and although the island was near at hand to the Mindanao strongholds of the pirates, it was visited by them much less frequently than more distant points.

No doubt the inhabitants of Bohol owe much to the disadvantage of their situation. Frequent encounters with the Moros and the necessity for constant preparedness developed and fostered military qualities.

The soil of the island lacks the responsive character general in the Philippines, and the Bohol cultivator was early forced to greater activity than, for instance, his neighbor on the other side of the Sea of Cebu. However, with careful tillage a very creditable quantity of various vegetable products is raised, sufficient, in fact, to leave a respectable surplus for export. A great deal of weaving of a good sort is done in the towns, a specialty being a peculiar kind of blanket and a rush mat called "*ticay*." In fact, they are a very busy people, and fully deserving of the good fortune which is likely to overtake them in the near future, for Bohol has some excellent timber lands, which, though limited in extent, contain valuable material, and the conditions are favorable to working them. These lands, with the coal fields and iron deposits, are bound to attract enterprise and capital before long.

THE ISLAND OF SQUIJOR.

Bohol has a notable dependency in the Island of Siquijor, which lies to the south. The people tell a story of its origin that is probably not far from the truth. They say that one day a dense cloud appeared over the spot where the island now stands. Out of the cloud issued thunder and lightning for several hours, and the next morning there was Siquijor, which they proceeded to occupy as soon as it had cooled off. This was, of course, long ago, but the event has lived in tradition.

Siquijor enjoys the remarkable distinction of being the most populous section of its size in the Archipelago; remarkable because there is absolutely nothing in the condition of the island to explain the fact. The soil is almost barren, and the inhabitants find it difficult to gain a subsistence from it. The only thing that appears to grow readily is a fair quality of tobacco, perhaps the best produced in the Visayas, where it is all more or less poor. There is not much of a market for it, however, and it generally passes into the hands of Chinese traders in exchange for cotton cloth. The entire island is a coral structure with a very thin and reluctant layer of soil upon it. Nevertheless, its area of one hundred and twenty-six square miles contains a population of upwards of forty thousand. Some of these souls make a precarious living by collecting *bêche de mer* and edible birds' nests, and a considerable number are engaged in the production of *sinamay*, a rough hemp fabric which is used for clothing by the poorer classes.

THE FATE OF DELINQUENT TAXPAYERS UNDER SPAIN.

Worcester spent some time on the island hunting bird specimens. He says that plenty of men were willing to work for him at the rate of five cents a day, and not a few asked only for food in compensation for their services. Before he left he was witness of the harsh measures which the Spanish Government habitually dealt out to delinquent communities.

"The taxes due from that poverty-stricken town (Siquijor, the capital of the island) amounted to some \$5,000 per annum. Cholera had recently devastated the island; the crops had failed, and for several years it had been utterly impossible for the *cabezas* to get any such sum out of the half-starved inhabitants. There was a shortage of \$7,000, and a commission had come down from Bohol to try to raise the money. Failing in this, they had seized the *cabezas*, confiscated their lands, houses, and cattle, and were about to deport them because they were guilty of the crime of not being rich enough to pay other people's debts! Forty-four men were torn from their homes and dragged away into exile, while those dependent upon them were left to shift for themselves as best they could.

"The officer in charge of the *cabezas* informed me that they would have the privilege of working out the debts of their constituents at the munificent salary of six cents per day, from which the expense of their food and clothing would be deducted."

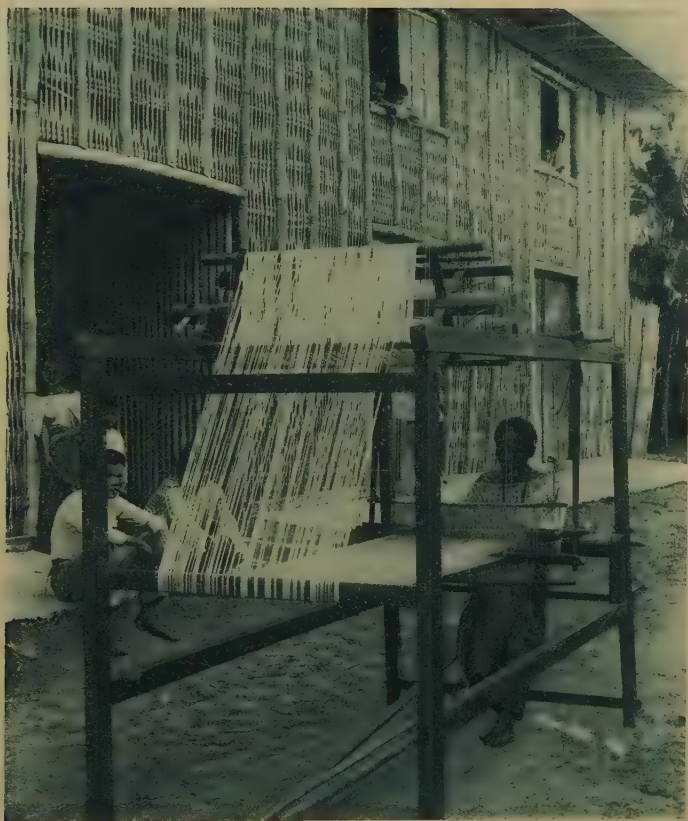
LEYTE.

Leyte is one of the most extensively cultivated sections in the Archipelago. One-half of its area, equal to two hundred and fifty thousand *hectares*, is under cultivation, mostly in hemp, the remainder of the island being mountains or grazing land. A considerable amount of sugar cane is raised, but Leyte is

A WEAVER.

The cloth workers are almost all women and in some districts, such as Iloilo, their product is an important item in the commerce. No little skill and infinite patience is required in the manufacture of the finer fabrics — piña and jusi.

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essentially a hemp district. In 1899 the exports of the fibre approximated one million *piculs*. The people convert a great deal of the product into fabrics of native wear and make from it the *cabo negro*, or black boat cable. Boat-building is quite an industry with them. They turn out all kinds of craft—from the dugout to the hundred-ton schooner. The larger vessels are constructed at the shipyards of Tacloban, which employ hundreds of workmen constantly. These Leyte shipbuilders display no mean degree of skill, and their product is in demand amongst the islands of the group.

MINDANAO AND SULU.

XIII.

MINDANAO AND SULU.

The Muhammadan Invasion—The Social Organization of the Muhammadan Malays—The Present Moro Tribes—Dress and Manners of the Moros—The Moro Warrior Presents a Bizarre Appearance—The Juramentados—Cruelties of the Datos—The Moro is Not a Model Muhammadan—The Moro Version of the Story of the Flood—Christ and Muhammad in Moro Legend—Basilan and the Yakan Moros—The Strange Sway of a Foreigner Over a Moro Community—The Masterful Rule of Arolas—Modern Sulu—The Moro is a Man of the Sea—The Origin of the Pearl—The Mother-of-Pearl Industry of Sulu.

Opinions differ as to the time and manner of the occupancy of the southern islands by the Muhammadan Malays. According to Foreman, a former chief of Borneo, named Tindig, with his followers, took possession of Sulu Island about the time of the Spanish conquest of the Philippines. He appears to have been a famous warrior, from whom the later Sultans of Sulu were proud to claim descent.

Tindig had been accompanied by his cousin, Adasalan, who made his first settlement upon the island of Basilan and later formed an alliance with King Dimasangcay, of Mindanao, whose daughter he married. Dimasangcay, and doubtless his entire family, embraced the Muhammadan faith.

Adasaolan's ambition grew with his increasing good fortune, and he conceived the idea of annexing the kingdom of his cousin. In this project he had the support of the Mindanao monarch, and their combined forces made an attack upon Sulu. The expedition failed, and after the retirement of the invaders Tindig prepared to retaliate in similar manner. Some years previously he had established an *entente* with the Spaniards, and now he repaired to Manila to seek their aid against his kinsman, and secured a promise of assistance. Relying upon the expected reinforcement, but lacking experience of Spanish tardiness, Tindig put his enterprise on foot. In the battle that ensued the Sulu chieftain was defeated and slain. After the event the armed boats from Manila arrived and, finding the issue settled, returned, doubtless with a sense of duty done.

THE MUHAMMADAN INVASION.

Sulu remained independent, but Adasaolan made alliances with the chieftains of Borneo, and there was soon an influx of Muhammadans to Mindanao and the Sulu Archipelago.

It has been stated how, at the close of the sixteenth century, Estevan Rodriguez, under a grant from the Spanish Government, attempted the conquest of Mindanao, and how the consequence was like to the disturbance of a hornet's nest. By that time the kingdoms of Mindanao and Sulu were on the most friendly

terms, and their future piratical ventures were frequently conducted in co-operation. For two hundred and fifty years every coast of the Colony was ravaged by the marauders, who even extended their incursions to the Bay of Manila. During this period perhaps nothing militated more seriously against the development of the islands than this incessant scourge, which the authorities were utterly unable to repress until after they brought gunboats into play.

The Moors, or Moros, comprise a number of originally distinct tribes which have since intermingled and which have always been allied by the common bond of religion. Traces of Bornean Dyaks, Bayos of Celebes, and Arabs, are frequently seen. There are also evidences of crossings with Spaniards and Chinese. In fact, the practice of carrying off women from the scenes of their widespread depredations and of cohabiting with them has made the Moros of the Philippines one of the most mixed of all Eastern races.

THE SOCIAL ORGANIZATION OF THE MUHAMMADAN MALAYS.

"Their essentially feudal institutions," says Reclus, "caused the whole social organization to rest on piracy. By the side of the sultans were the almost equally powerful vassals, the *datu*, each of whom, with the reservation of homage due to his suzerain, became proprietor of the land conquered and the

wealth plundered by his retainers. The *tao marahay*, or good men, that is the free warriors, accompanied them on their predatory expeditions, while the *sacope*, or lack-land class, were reduced to a state of serfdom."

There can be little question that but for the Spanish occupation, this condition would have ultimately obtained throughout the Philippines with a universal acknowledgment of the Muhammadan religion.

The old feudal tenure is fast relaxing its hold upon the people, and the Moro nation presents the problem of a number of petty chiefs who are breaking away from allegiance to their over-lords, but at the same time display no disposition to accept a new master kindly. Referring to the decline of the sultanates, Dr. Barrow says: "To-day the Sultan of Mindanao is an exile from the Rio Grande, with his home at Dumanquilas Bay. His prestige is gone, he is poor to the point of destitution, and he will never regain the position occupied by his predecessors. Such seems to be the fate of the sultanate among these tribes whenever the native power meets formidable opposition and falls, as it invariably must, into the hands of a weak and dissipated prince. The present sultanate of Sulu is rapidly approaching the state of weakness and decay represented by the sultanate of Mindanao, and, unless supported by the United States Government, will not be able much longer to command the obedience of the Moros of the Sulu Archipelago. The days of the Moro power are past. For three centuries

they defied the European and carried war with impunity into his territory. For generation after generation the Spaniard stood purely on the defensive and sought by treaty and subsidy to win where he could not conquer.

"There must have been some barbaric splendor about these old pirate states when at the height of their power and daring. To see how they could impress Europeans one should read the notable volume of Captain Forrest, 'A Voyage to New Guinea.' Captain Forrest visited and formed an alliance with the Sultan of Maguindanao (Mindanao) in 1776. There is something almost melancholy about their decadence. Theirs were the only political achievements of any consequence ever made by the people of the Philippines, but their passing, none the less, marks a gain for civilization."

THE PRESENT MORO TRIBES.

At the present time the Malanao Moros, or Moros of the Lake, are the most numerous tribe in Mindanao. Their stronghold is the district of Lake Lanao, around which their villages are thickly clustered. They are believed to number not far short of one hundred thousand.

The Maguindanao Moros, whose name has practically the same signification as that of the first named tribe, number about fifty thousand, and are to be found mainly in the vicinity of Cottabato. This name

has long been used to designate the warlike Muhammadan tribes of the valley of the Rio Grande. They were almost the first Moros with whom the Spaniards came in contact and their name passed to the island itself. Emigrants from this tribe peopled the districts of Zamboango and Davao. In the interior of Zamboango are the Kalibuganes, who are derived from a mixture with the Subanos.

The Sulu Moros are found mainly in the group of islands of that name, where they form the dominant element in the population. Where they have emigrated, even in small numbers, their strong personality and aggressiveness have had a marked influence.

The Yakan tribe is practically restricted to the interior of the island of Basilan, the coasts being occupied by the Samals.

The Samals are rarely located elsewhere than on the seashore. They predominate in the Tawi Tawi group, which was the most inaccessible stronghold of the pirates of whom this tribe was the most active and furnished by far the greater number. They are scattered throughout the Sulu Archipelago, and there are numbers of them in the Zamboango district. The Samals, who represent the latest Moro immigration, are superior to the other tribes in force and intelligence.

What differences exist between the various tribes seem to be mainly the marks of varying stages of removal from savagery, the highest degree being

represented by the Samals, and the lowest by the boat-dwelling Bajaus.

DRESS AND MANNERS OF THE MOROS.

Physically the Moros are the superiors of the Filipinos, being taller and more robust; in fact, the Moro is often stocky and muscular. A peculiarity is the development of the feet and toes, due to the use to which they are put in many daily occupations. The Moro uses his toes as freely and effectively as we do our fingers, and finds it much more convenient to pick an object from the ground with them than to stoop down and raise it with his hand. When he climbs a tree the rope is grasped by the feet, and when sailing a boat he will take a couple of turns with the halyard round the big toe. The Moro dress will distinguish him at once from the native of the north. The former wears no shirt in or out of his breeches. Sometimes the dress consists of nothing more than the *sarong*, a voluminous cloth tied around the waist and falling to the calves of the legs. What may be termed the national costume consists of a close-fitting, short jacket, and trousers loose in the seat and very tight on the legs, reaching to the ankles. These garments are often as bright and vari-colored as Joseph's coat, and are ornamented with a great number of brass buttons. Sometimes straw hats of extraordinary shapes are worn, but the common headgear is the turban.

A Moro chief in the full panoply of war is rather a grotesque object to the unaccustomed eye. Upon his head is a brass helmet, into which is stuck the largest and stiffest feather procurable. In order to secure the headpiece a cloth, perhaps the turban, is lapped around it and tied under the chin, giving the warrior the appearance of suffering from a severe attack of neuralgia. The virile effect of a steel cuirass is somewhat mitigated by the gaudy feminine skirt which depends from the waists to the knees.

THE MORO WARRIOR PRESENTS A BIZARRE APPEARANCE.

Most Moro men carry a short dagger stuck in the *sarong*, or at the breeches belt, but if the individual is a noble the *kris* takes the place of the former weapon.

The dress of the women is made up of a bodice fitting close to the skin and a baggy bifurcated skirt. The *jabul* is a long scarf which is thrown over the head and draped about the body. It may be a modified survival of the veil worn by Muhammadan women in Arabia and other countries. Neither sex wears shoes as a rule. The women tie their hair up in all manner of fantastic knots, while the men leave it loose. Children generally go naked at home, but wear the *sarong* in public.

Like the Filipino, the Moro bathes frequently; in fact, he spends a large proportion of his time in the water when conditions are favorable, but it would

seem to be from love of aquatic exercise rather than from any desire for cleanliness, for their dwellings and surroundings are filthy.

The Moro never goes abroad without a weapon of some sort. The *kris*, or *barong*, the arms of warfare, are the most commonly carried, but sometimes a spear, or a club not unlike a boomerang, is the substitute. The *barong* is a sword with an oval double-edged blade, from twelve to eighteen inches long, graduating to a point. To decapitate a man with one clean stroke is no great feat for a Moro warrior. The *kris* is straight, or wavy, the former being used for cutting and the latter for thrusting. A weapon is prized for the number of persons it has killed, and one that has an established record of a great many deaths to its credit will bring a high price. Rifles are very highly prize by the Moros, but, fortunately, they have always had great difficulty in obtaining them.

The Moro loves to close with his enemy, and his weapons are all adapted to hand-to-hand fighting. It follows that he is a very dangerous opponent if he gets within arm's length, but against troops furnished with firearms he has little chance in the open.

THE JURAMENTADOS.

The *juramentado* occasionally furnishes an example of the Moro's capacity for doing execution in a crowd. The *juramentado* is a Muhammadan who

has taken a religious vow to devote his life to the extinction of as many Christians as possible. The *pandita* works the *devotee* up to the requisite pitch of emotional excitement and, perhaps, an extra large dose of opium puts the finishing touch to his fanatical frenzy. Assured that if he dies in the act of taking the life of a Christian all the joys of Paradise will be his, the *juramentado* sets out to find as many victims as opportunity may afford. Sometimes a band of these devoted murderers act together, and in that case they are likely to choose some gathering of a village, such as the celebration of a feast day, for the occasion of their onslaught. When half a dozen of them contrive to get into a throng of this kind, which is very seldom, of course, for they are not permitted in the Christian towns with their arms, the number they will slay in a few minutes is almost incredible. Soldiers cannot put them out of action before they have done great damage to their ranks. It is told how five *juramentados* charged a company of Spanish troops armed with rifles and killed, or badly wounded, nineteen of their number before they themselves were slain.

The Moro believes that he is a very superior being, and looks upon all other natives with the utmost disdain. Religious difference may have a great deal to do with this feeling, but the foundation of it probably lies in the superior courage of the Muhammadan tribes. They are densely ignorant, very few of them

being able to read or write. The knowledge of their *panditas*, or priests, is of a rudimentary character and generally limited to a smattering of the "*Kitab*," as they term the Kuran. It is doubtful if one of them can read it in the original Arabic.

CRUELITIES OF THE DATOS.

The *datos*, and warrior class, refrained entirely from anything like labor. The slaves and women did all the work and supplied all the wants of the master of the establishment. As a general thing their slaves do not appear to have fared badly, although the *datos* were capable of the worst barbarities on occasion and treated attempts to escape with the utmost severity. *Dato Uto*, a representative of the latter-day Moros, was notorious for the refinement of the cruelties he practiced upon his slaves. Those who were caught in an attempt to escape had the tendons of their legs cut below the knees so that they could never after walk except with great difficulty. Others he caused to be bound naked to trees, where they would be exposed to the burning rays of the sun by day and the stings of mosquitoes and other insects at night. Death within forty-eight hours was the frequent result of this treatment.

Moros of all classes, from the sultan to the *sacope*, are born thieves. They rob whenever opportunity presents itself and from neighbors or kinsmen as readily as from strangers, as much apparently for

the pleasure derived from the act as from desire for the object stolen.

THE MORO IS NOT A MODEL MUHAMMADAN.

The Moro is far from being an orthodox Muhammadan; indeed the Moslem of civilization would hardly recognize him as a co-religionist. The Moro falls very short of living up to the dictates of the Kuran and frequently violates its stern prohibition against indulgence in strong drink. Toward strangers the Mussalmin of the Philippines have always displayed the greatest reticence regarding the particulars of their religious belief, and investigators generally meet with a flat refusal to impart information, or else are put off with a recital of a fanciful nature. Worcester appears to have been unusually fortunate in this respect. He contrived to gain the confidence of the Minister of Justice of the sultanate of Mindanao, "a very intelligent man, who looked as if he had white blood in his veins." During a succession of visits, in which the chief attraction was "a microscope and sundry copies of illustrated papers," this person stated that the Moros believe that there is but one universe and one God. He is omnipresent, omnipotent, and omniscient, and his form is that of our thoughts. The air above us and the space beneath the earth are inhabited by spirits. Animals have spirits, but they expire with the death of the creature, whilst the soul of man lives on forever.

It enters the body through a hole in the top of the skull, contrived for that purpose, and leaves it through the same aperture. During life the soul permeates the entire body, as is proved by the fact that the whole structure is *sensitive*. Some *panditas* maintain that after death the soul immediately repairs to the presence of God; others that it goes beneath the earth to rest in oblivion until the judgment day. The soul of a bad man is eventually consigned to hell, where he suffers torment regulated according to the character of his misdeeds. The offending member of the body is the seat of pain. There is no fire in hell. "Where would the fuel come from?" In the course of time the wicked expiate their sins and are taken into heaven. According to some priests evil brings its own punishment in mental and physical suffering upon the earth, and atonement comes before death.

The purged soul will have the same form as the body, but will be like "gold and diamonds," that is, glorified. Certain Moro theologists teach that the souls of the good wait in the air, and those of the bad in the earth, until the final reckoning at the end of the world. At that time, all souls will be carried up by a great wind to the Mount of Calvary, where they will be confronted by Gabriel, Michael, and the Weigher, who will place each one in the scales. Souls heavy with sin will be sent to hell.

The Moros know all the prominent characters of the Old Testament, "Ibrahim," "No," "Mosa," "Daud," "Yakub," "Sulaiman," and the rest, and have woven around some of them marvelous tales of fabulous adventure. Like all people, even the most primitive, they have their story of the flood.

THE MORO VERSION OF THE STORY OF THE FLOOD.

When the forty days and nights of rain set in, Noah and his family went into a box, taking with them one pair of each sort of bird and beast. People who neglected the opportunity to join the patriarch were overtaken by the flood and providentially changed to forms that had some chance to survive. Those who took to the hills became monkeys; those who made for the water became fish. The Chinaman was changed to a hornbill. A woman who was eating the fruit of a seaweed was turned into a fish called *dugong*, and her limbs may be seen under its skin to this day.

Worcester had made several unsuccessful attempts, in different parts of the Moro country, to get an explanation of the strong aversion of the people to pork. One day his friend, the Minister, called in a state of inebriation and, taken off his guard, made the following interesting statement:

CHRIST AND MUHAMMAD IN MORO LEGEND.

"Jesus Christ, called by the Moros Isa, was a man like ourselves, but great, and good, and very power-

ful. He was not a son of God. The Moros hate and kill the Christians because they teach that men could slay a son of God.

“Mohamoud had a grandson and a granddaughter of whom he was very fond. As he was king of the world, Christ came to his house to visit him. Mohamoud, jealous of him, told him to prove his power by ‘divining’ what he had in a certain room, where, in fact, were his grandchildren. Christ replied that he had no wish to prove his power and would not ‘divine’ (divinar). Mohamoud then vowed that if he did not answer correctly he would pay for it with his life. Christ responded: ‘You have two animals in there different from anything else in the world.’ Mohamoud replied: ‘You are wrong, and I will now kill you.’ Christ said: ‘Look first and see for yourself.’ Mohamoud opened the door and out rushed two hogs into which Christ had changed his grandchildren.”

Worcester goes on to say: “Moros are forbidden to tell this story to infidels because it shows that Christ outwitted their great prophet. When my informant sobered up and realized what he had done, he hung around, day after day, beseeching me not to let any one know what he had told me, from which fact I inferred that *he thought* he had told me the truth and not a fable invented for the occasion.”

In their futile attempts to subdue the Moros the Spaniards established garrisons in the south, but

beyond the immediate neighborhood of these posts the authority of the white man was merely nominal. The Moros were never compelled to pay taxes, and in recent years an effort to collect *tributo* resulted in the annihilation of the entire garrison at Sulu.

The earliest Spanish post among the Moros was at Zamboanga, where the old fort is still a feature of the town. It proved to be, more on account of the negligence of the authorities than from the natural unhealthiness of the climate, a veritable death-trap. For many years the casualties, due to disease, represented eighty per cent. of the force. Nevertheless, as the service was invested with the character of a crusade, soldiers embraced it willingly.

BASILAN AND THE YAKAN MOROS.

At the village of Isabel, the capital of Basilan, the Spaniards had another post, with a military depot on the neighboring islet called Malamaui.

The Yakan Moros of Basilan had acquired an unenviable reputation for disregard of the laws of man, or God, but towards the close of the Spanish *régime* they were held in check under very curious circumstances.

Their *dato* was, and probably is yet, a Visayan, or Tagal, criminal who had been sent down to the penal settlement at San Ramon, near Zamboanga, which is at present the site of a model farm. The convict, whose name was Pedro Cuevas, planned escape with

two of his fellow prisoners. Whilst at work in the fields one day they overcame their guard, killed the Spanish officer in charge, and got away, taking a carbine with them.

They immediately followed the coast to Ayala, which they reached on the night following the day of their *coup*. Here they murdered a Chinese shop-keeper, plundered his store of what they needed, and, securing a boat, crossed over to Basilan. On landing, they proceeded at once to the nearest village and to the house of the *dato*, upon whom Pedro called to come out and fight. Such an invitation was never declined by a Moro, and the chieftain rolled out of bed with alacrity and soon emerged from his hut with lance and shield. The combat was a very unequal one, for before the Yakan could use his weapon Pedro shot him dead. The convict then turned his carbine upon the assembling villagers with such effect that before daybreak they were glad to install him in the place of the fallen *dato*.

THE STRANGE SWAY OF A FOREIGNER OVER A MORO
COMMUNITY.

Dato Pedro subdued the neighboring villages one after another and rapidly established a reputation for bravery and, which was of equal influence with the Moros, for having a charmed life. In a short time he had practical control of the entire island. He maintained his rule with an iron hand and hundreds

of stories are told of his despotic practices. The slightest opposition to his wishes met with immediate death. One of many similar stories is that a visitor from Zamboanga happened to admire a horse, upon which a Moro from a nearby village had just ridden up to *Dato* Pedro's house. The chieftain asked his friend if he would like to have it, and being answered in the affirmative, without more ado shot the rider as he sat in the saddle and presented his mount to the visitor.

Pedro contrived to ingratiate himself with the Spanish authorities at Isabel, who realized the advantage of having the unruly inhabitants of the island held in leash by a man on friendly terms with themselves. His crimes against the State were pardoned and he lived on excellent terms with the resident governor.

The domination of this remarkable man over an island full of turbulent Moros was due in a measure to the fact that he only among them possessed firearms, but probably in a much greater degree to their belief that he was impervious to harm. The natives of the Philippines everywhere believe that certain individuals have charmed lives. Almost all the leaders of the bands of *tulisanes* enjoy this distinction. To attempt to injure such a one is not only useless, but highly dangerous and foolhardy.

The administration of General Arolas, though free from acts of barbarity, was characterized by the un-

flinching severity of Pedro, and, as the former was the only Spaniard who ever succeeded in maintaining order among the Moros, the methods of these two men in their respective spheres may afford some hint as to the most effective means of dealing with the unruly people of the southern islands.

The Moros called Arolas "papa," the term denoting, however, not affection, but respect. These people can understand justice, but they have no appreciation of kindness, which they invariably construe as a sign of weakness. They soon learned that Arolas never indulged in idle talk, or feeble threats. His promise, whether it entailed good or ill, was sure of fulfillment. His order disobeyed was inevitably followed by punishment. He made little distinction between white men and brown, *dato* or slave.

In Arolas' day, Sulu was the cleanest town in the Colony, and probably the cleanest under Spanish administration anywhere. The streets were covered with white sand and regularly swept twice a day, not that they needed it, but, as the Governor was wont to declare, "if it were not done twice a day soon it would not be done once a week." A story was current that he had issued an order forbidding the trees to shed their leaves upon his streets. A white man who threw a cigar stub or a scrap of paper upon the street was promptly fined and a native thrashed.

The wide thoroughfares and ample sidewalks, bordered by cement gutters and lined with shade trees, are laid out with exact uniformity and at right angles. Scarcely a trace of the ancient town was left when the Spaniards, in 1878, took it and cleared the site preparatory to building the present town, with its defensive walls of brick, and redoubts and block-houses.

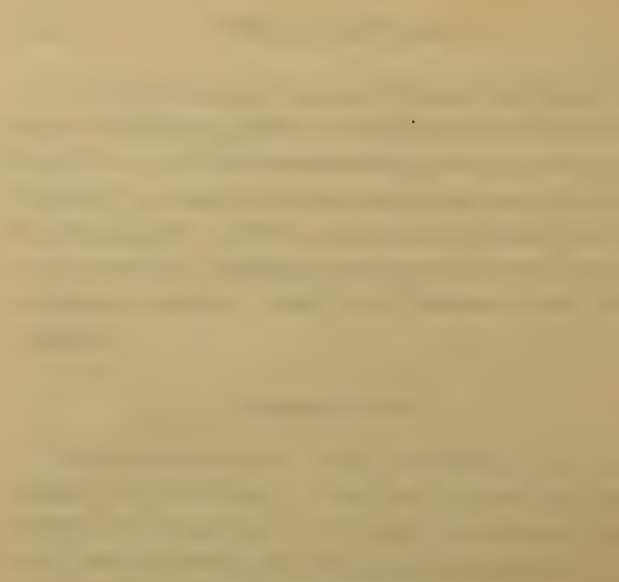
MODERN SULU.

Sulu was the ancient capital of the Sultans and the centre of Morodom. After its capture the native capital was transferred to Maibun on the south coast, and here the Sultan has his residence to-day.

The houses have an unfamiliar appearance to the visitor from the northern islands. They are painted white, or treated with calsomine, and the *nipa* roof of the Filipino dwelling is entirely absent. There are several substantial buildings of stone used for public purposes and to quarter the troops. For the accommodation of the Moros who come in on certain days with produce and merchandise, a large market has been recently constructed.

Sulu is only a good sized military post with a population of a few hundred, only four of whom are Moros, but it is a beautiful little place, enjoying good water and a salubrious climate.

The anchorage is good and a stone pier runs more than one hundred yards into the sea, with a light-



A sepia-toned photograph of a village scene in the Philippines. The image shows several women walking along a path, each carrying a large, heavy load on their heads. The loads appear to be woven baskets or similar containers, some of which are quite tall. The women are dressed in traditional or simple clothing. The background shows a hilly landscape with some buildings and trees. The overall tone is historical and documentary.

A VILLAGE SCENE.

Like most Oriental women those of the Philippines can carry heavy burdens upon their heads, and the practice gives them an upright and graceful carriage.

From Stereograph Copyright, by Underwood & Underwood, New York.



house at the end of it, for Sulu is a port of considerable consequence, having direct communication with Singapore and Manila, and doing a large interisland trade. The export business is almost entirely in the hands of Chinese.

THE MORO IS A MAN OF THE SEA.

The Moro is almost an amphibian and the only kind of work to which he takes at all kindly is connected with the water. Children are at home in it as soon as they can walk, and swim and dive with remarkable ease and confidence. The men are the most expert divers in the world, and can remain under the surface for several minutes at a time. They frequently encounter sharks, but are absolutely fearless and will often plunge in and attack the creatures with a knife.

The principal industry of the Sulu Archipelago is the collection of sea-produce, and competent judges have declared that it is capable of great extension.

Pearls and mother-of-pearl are secured in large quantities in these waters, where the most perfect conditions exist for the development of the mollusks. It is said that the area suited to the growth of the pearl-oyster approximates fifteen thousand square miles, an extent of bed more than sufficient to supply the present large demand of the whole world for mother-of-pearl.

The search for pearls is a very precarious occupa-

tion, and the Moro divers consider it merely incidental to the collection of the more certain product. A tally was kept of five thousand bivalves, and it was found that they did not yield a single pearl worth twenty-five dollars. On the other hand, it is said that an Englishman, a few years since, discovered a shell devoid of the oyster but holding sixty-five pearls.

THE ORIGIN OF THE PEARL.

“There have been all sorts of theories advanced as to the origin of the pearl. One ancient author states that the oyster rises to receive the raindrops which are afterwards converted into pearls, and this theory obtained amongst the natives of the new world at the time of Columbus, as they thought they were formed from petrified dewdrops in connection with sunbeams. . . . The prevailing idea, however, amongst scientists is that the formation is caused by an effort on the part of the oyster in which the pearl is found to rid itself of an irritation caused by the presence of some foreign body which excites the secretion of nacreous matter, in concentric layers, until the foreign substance is encysted, much in the same manner as the human body encysts foreign bodies embedded therein, and renders them comparatively harmless. The experience of pearl-fishers lends weight to this theory, because they find that shells irregular in shape, stunted in growth, bearing excrescences, or

having shell honeycombed by parasites, are the most likely to yield pearls."

The Sultan of Sulu has always been the owner of some of the finest pearls in the world, secured from the waters of his own territory. From time to time, as funds ran low with the potentate, rare specimens from his treasury have found their way to London and Paris.

The Sultan, who died in 1879, was known to possess a box full of pearls of extraordinary value, but after his death they disappeared. Subsequently his son and successor recovered a portion of the stolen gems, and in 1882 sold a few in order to defray the expenses of his pilgrimage to Mecca. He must be at present the possessor of a very fine collection.

THE MOTHER-OF-PEARL INDUSTRY OF SULU.

The hard, silvery, iridescent coat, which adds greatly to the commercial value, is especially characteristic of the Sulu pearl. The mother-of-pearl, too, from this region ranks the highest in the market, bringing as great a price as nine hundred dollars a ton.

The chief sources of the world's supply of this ornamental material are Torres Strait, Western Australia, and the Sulu Archipelago. Until 1886 Manila was the chief centre of this trade in the Orient, but the short-sighted policy of the Colonial Government forced its transfer to the British port of Singapore.

The present trade of the United States in this product is in an abnormal condition. The raw material is derived from American territory, but passes through Singapore into the hands of British importers in London, whence it is shipped to the United States and worked up in American factories. The business is one of no small consideration, as is proved by the fact that the United States has for several years past consumed more than one million dollars' worth of the material annually.

VITAL ISSUES.

XIV.

VITAL ISSUES.*

The Inception of American Rule—Police—Education—Judiciary—Personal Rights—The Friar Lands—The Question of Independence—"The Philippines for the Filipinos"—The Popular Assembly—An Unselfish Administration—Taxpaying Capacity—Natural Resources—Trade Relations with the United States—The Local Business Situation—The Projected Railroad System—The Labor Question—Climatic Conditions—The Broader Policy.

President McKinley conceived that the war might be brought to an end if with the rigor of a military campaign he mingled, as an object lesson, the peaceful methods of organizing civil government, and so he sent a civil commission, which, following in the wake of the army wherever it deemed conditions favorable, organized municipal and provincial governments on bases so liberal in the matter of autonomy as to surprise the inhabitants of the islands. The municipal code gave COMPLETE AUTONOMY TO THE PEOPLE—that

* The following chapter is composed of literal extracts from public addresses delivered by the Hon. William H. Taft during the year 1904, discussing the most important issues connected with the Philippines.

is, to those eligible to vote, who constitute hardly 15 per cent. of the total population. The organization of governments began after the second election of McKinley. Then, too, was formed the Federal party, a party the main plank of which was peace under the sovereignty of the United States; and the second plank of which expressed hope that, as the people developed in the course of self-government, the Archipelago might be received, first, as a Territory and then as a State.

The leading members of the Federal party had been *Americanistas* and always sympathized with America in its desire to establish just and well-ordered government there. They now were able to unite with them in every town in the islands a great majority of the respectable people—the educated, wealthy people—who, overcoming their fear of assassination and intimidation by the guerrillas, came together in such force as to protect themselves, and joined in making up municipal and provincial governments under the American sovereignty, which are the foundation of the present general government in the islands. The provincial government was not entirely autonomous. It was left to the people to elect the governor. The other provincial officers were appointed. Certain of them were SELECTED UNDER THE CIVIL-SERVICE LAW. In the central government the commission of five Americans was increased by three Filipinos, and a civil governor was subsequently ap-

pointed, who was a member of the commission, but did not have the veto power. That power resided in the Secretary of War. All this was done under President McKinley as Commander-in-Chief, and was a quasi military government until, by an act passed in July, 1902, the government which had been formed was confirmed by Congressional action and its powers considerably enlarged and extended. By that act a popular assembly will be elected in 1906, and will form one branch of the law-making power of the islands.

The next thing which was done was the suppression of ladronism. In order to do this it became necessary to create a force of native constabulary in each province under American officers. Numbering 6,500, with the assistance of 3,500 Philippine scouts, the constabulary in two years after the close of the insurrection HAS REDUCED LADRONISM to less of a nuisance than it ever has been in the history of the islands. The constabulary has had its defects and its abuses, but on the whole it has done remarkable work in policing so many islands occupied by so many millions of people. The army has been called on only in three or four instances. The task of suppressing the ladrones has been done almost wholly by Filipinos.

The next thing which was done was to establish an educational system, and a thousand American teachers were imported and sent over the islands to teach the children, and to exercise the beneficent influence

that teachers, as almoners of that which is most valuable from the government, are able to exercise among people who hold in high esteem, education.

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There has been considerable criticism of the educational system in the Philippines, and I do not say that the system is perfect, but I do say we are accomplishing very substantial results. We are teaching the people English, and the people desire to learn English. Certain persons who have not been in the islands, or who were there so short a time as to learn but little, are quite contemptuous of the attempt on the part of the Government to teach English. There is no JUSTIFICATION FOR THEIR SNEERS or contempt. We are now teaching only about 10 per cent. of the youth of the islands of school age, but we are preparing a very large number of Filipino teachers in English at normal schools. We send 100 Filipino students a year to study in America. From these sources we expect to fill the ranks of the Filipino teachers with English-speaking Filipinos, so that in less than a decade we shall be able to offer to every Filipino child who will study, the means of learning English and of getting an elementary education, and of studying in training schools when he is adapted to learn the trades.

The eagerness with which English is studied by the Filipino finds its cause in the badge of equality

which the opportunity offered constitutes. Under the Spanish *régime* the study of Spanish by the masses was not favored. I fear that the contempt felt for our efforts to educate the Filipinos finds its reason in a desire to get rid of the islands. I agree that such a system of education as that which we are preparing is probably inconsistent with a short stay of the United States in the islands. We cannot teach Filipinos English in a year. We can hardly teach them English in a generation. We can only teach them English thoroughly through the children, but we MUST WAIT UNTIL THE CHILDREN GROW UP and become men before the adults shall speak English. Now, it is absolutely essential to the preparation of the people of the Philippine Islands for any kind of permanent self-government in which there shall be the safety brake of a popular, intelligent public opinion, that the 90 per cent. of ignorant people in the islands should be given a chance to receive an elementary education, and it is upon this fact that I found the judgment that if we are in the islands and expect to discharge our duty to the people of the islands and prepare them for self-government, we cannot hope to do so short of a generation or longer.

Next in order, we have attempted to construct public improvements in the islands. Indeed, it comes first in order, for the first act which was passed was the appropriation of \$1,000,000 from the treasury for the construction of roads, under the control of the

military government. This money was expended as economically as possible by the military governor, and I doubt not has done considerable good in the country. But the effect of the torrential rains upon the macadamized roads in the tropics is so destructive that it requires nearly as much to keep a road in repair as it does for its original construction; and the dreadful agricultural depression, due to the death of nearly all the cattle from rinderpest, and the consequent failure of local taxes due to this depression, have caused local authorities necessarily to neglect the repairs.

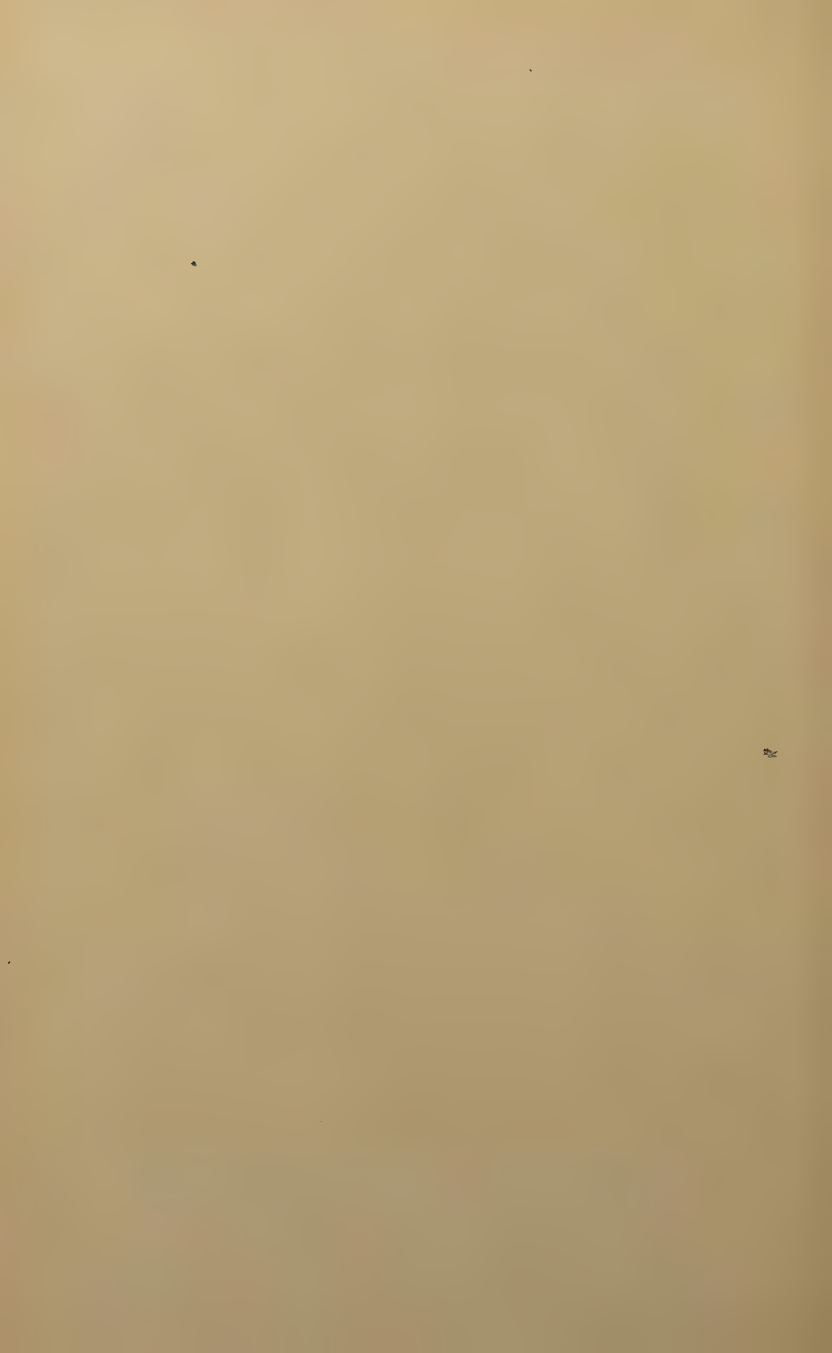
The Commission has expended two millions and has contracted to spend two millions more in THE CONSTRUCTION OF PORT WORKS AT MANILA, and about half a million at Cebu and Iloilo. Mr. Colquhoun complains that the money for Cebu and Iloilo has been appropriated but has not yet been expended. This is true. We have advertised for bids, but when I left the islands we had not succeeded in inducing anybody to undertake the work. Since leaving the islands I understand that a contractor has taken the work at Cebu. It must be understood, even by an active, enterprising Englishman, that in a country like the Philippines, where there are not many contractors, there is very little capital, and the former unsettled conditions do not attract many contractors from abroad. It is difficult to secure the doing of work even if you have the money and will. Millions

NATIVE POLICE.

A squad of native policemen armed with bolos, and one of their guardhouses at Cebu. These men are Visayans.

From Stereograph Copyright by Underwood & Greeve, New York.





are now being spent in the islands on roads, and if we can secure the requisite legislation I am sure that millions more will be spent in the construction of railroads. The truth is, it is much more economical to construct railroads than it is to construct wagon roads, and railroads will revolutionize business and society in the islands.

The third thing which we have done is to establish a judiciary system. It was proposed that we have what is called United States Court, in which foreigners and Americans could be heard against the natives, and that the other courts should be courts for natives only. We declined to take this view, and created courts in which both native and American judges sit. The SUPREME COURT OF THREE FILIPINO JUDGES and four American judges will compare favorably with any supreme court of the States, and the courts of first instance, numbering now fifteen, in which part of the judges are native and part American, covering the entire Archipelago, are doing their work well, and are bringing to the people an understanding of what the administration of justice should be. I think there is no one part of the government in which we may justly take more pride than in the judiciary, and while its organization has been surrounded with great difficulty because of the necessity of interpreting from the Spanish language into the English, and from English into the Spanish, and because of the necessary ignorance of the Filipino judges of American pro-

cedure, and the necessary ignorance of the American judges of the civil substantive law, nevertheless the obstacles seem to have been overcome, and the system works much more smoothly than could have reasonably been expected.

We have not disturbed in the slightest the substantive law of the islands, which is embraced in civil codes, the chief of which were the civil, the mortgage, and the commercial codes. We have adopted a civil code of procedure to take the place of the Spanish code of procedure, which was so technical as to enable an acute lawyer to keep his opponent stamping forever in the vestibule of justice. The criminal code of procedure, adopted by general order of General Otis, follows the California code. It is simple, and seems to be effective. The criminal code itself of Spain, eliminating political offenses and religious offenses, is quite well adapted to the people, and no substantial change has been made therein. A few crimes have been added to meet the exigencies of ladronism, and to prevent the press from an abuse of their privileges. But all these provisions were WITHIN THE CONSTITUTIONAL LIMITATIONS, which, by virtue of the instructions of Mr. McKinley to Mr. Root, and their confirmation by the Congress of the United States, extended to the people of the islands all the civil rights included in the Bill of Rights, except the right to bear arms and the right to trial by jury. Now, I have been frequently asked in let-

ters from suspicious individuals, resident in and about Boston, whether it is true that all the civil rights are secured to the inhabitants of the Philippine Islands. Are they not still subject to the surveillance and annoyances which they encountered under the Spanish rule? With respect to this I should like to say first that any inhabitant of the Philippine Islands is entitled to apply to court for the preservation of every right mentioned in the Bill of Rights, save the right of trial by jury and the right to bear arms, and that if he will assert his right it will be secured to him.

It may be that in the province of Cavite, where ladronism is so ingrained that it has been necessary at times to declare martial law and to suspend the writ of habeas corpus, this is not true. Everywhere else it is the fact. Now, the question is asked, Are not people arrested for exhibiting seditious plays? My answer to that is that they have been. In Manila the exhibition of a play in which the AMERICAN FLAG IS STAMPED UPON and spit upon, and American soldiers are represented as being killed, and the American nation as overwhelmed by violence, is an invitation to force and violence against the government by the ignorant people, and its suppression by arrest of the instigators is no violation of the Bill of Rights.

The question is asked whether a man may advocate the independence of the islands by peaceable means and be free from prosecution and persecution by the

Government. My answer is that he may. There is a party—the Nationalist party—a plank in whose platform is the obtaining of independence by peaceable means. I do not mean to say that where a suspected *insurrecto*, one suspected of membership in the physical-force party, is loud in his advocacy of independence, that he may not, by the secret service bureau of the police, be subjected to surveillance, but that is an incident from which even CITIZENSHIP IN THIS COUNTRY IS NOT FREE. It suffices that he cannot be prosecuted or convicted for advocating independence by peaceable means.

Next we have attempted, as far as we could, to relieve the political situation in the islands from certain disturbing factors growing out of their religious history. Spain took over the islands in 1564, when she sent Legaspi as military commander of a fleet of five ships, and five Augustinian friars, including Urdaneta, to take possession of the islands. With very little friction she assumed sovereignty over the whole Archipelago, and it is not too much to say that the islands were brought under Spain's control and influence not by force, but by the peaceful exertions of the Spanish friars of the five orders—the Dominicans, Augustinians, Recoletos, Franciscans, and Jesuits. The men of these religious orders labored for three centuries to make Christians of the Filipino people. They taught them the arts of agriculture and gave them other instruction. Until the nine-

teenth century they exercised great control over the natives by reason of their sincere protection of the natives' rights.

Before 1800 they received natives into their orders and permitted the hierarchy to be partly filled by natives. During the last century, however, there grew up a feeling of jealousy between the native clergy and the friars, growing out of their rivalry for rectorships in parishes throughout the islands. Added to this, when the Suez Canal was opened Hordes of Spaniards came to the islands, offices were greatly increased, taxes became heavier, and the hospitality of the Filipinos, so freely offered, was abused. The young and educated Filipino began to have conceptions of liberty and a better administration of government. The Spanish authorities were glad to use the friars, who were reactionary in their opinion, as civil instruments in the detection and prosecution of such sentiments. Hence it was that the government and the friars were brought together in opposition to the Philippine people and a hostility was engendered which knew no limit against those priests whose predecessors with utmost self-sacrifice and loving devotion to duty had Christianized the islands and prepared their people for a higher civilization. The spirit of vengeance against the friars was sufficiently shown in the revolution of 1898, when 40 of their number were killed by the people and the insurgents and 300 were imprisoned and subjected to all sorts

of indignities and suffering until released by the American troops. In this state of public feeling it is not surprising that the ownership of 400,000 of the BEST ACRES IN THE ISLANDS by the religious orders caused an agrarian revolt among their tenants, and the question of the collection of their rents, their title to the land being clear, became a very serious one. They did not collect any rents from 1896 to 1903. Courts were then opened and the friars had the right to resort to them for collection, not only of the rents just accruing but also for the rents from 1898. A general attempt to collect such rents must have resulted in judgments. There would have followed the eviction of some 60,000 people at the instance of the unpopular religious orders. The situation was critical. A visit to Rome for consultation upon this question seemed wise, and it was undertaken.

A general basis of agreement was reached with the Vatican, and after a year of negotiation in the islands a price was fixed upon the lands and the contract of purchase made last December; the money for the purchase price has been borrowed and is in the banks awaiting perfecting of the titles and the surveys necessary for the description of the land.* As an accompaniment of the purchase of the lands and a result much to be desired, the number of friars in the islands has been reduced from something over 1,000

* The "friar lands" have since been transferred to the United States.—AUTHOR.

in 1898 to about 246 on the 1st of January, 1904, and of these 246, 83 are Dominicans who have renounced any right to go into the parishes, 50 are infirm and unable to do any work, so that only about 100 are available, and many of these are engaged in educational work. The intervention of the Spanish friars, therefore, CEASES TO BECOME IMPORTANT, because there are not enough of them in the 900 parishes to cause any considerable disturbance. This certainly removes a great cause of contention and contributes to the tranquility of the islands.

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And now, gentlemen, what of the future? It has been strongly urged by a large number of citizens of high standing that we ought now to promise ultimate independence to the Filipinos. I beg, respectfully, to differ from this view. The promise which it is proposed to give is a promise which must be conditioned ON THE FITNESS OF THE FILIPINOS for self-government. The promise holds up to the people of the islands for constant discussion as a present issue the question, "Are we now fitted for self-government?" There may be some people in Manila and the islands who know and are ready to say that the people are unfitted, but, on the other hand, the Filipinos are not different from other people, and the great majority of them would say with emphasis, "We are entirely fitted for self-government." The moment therefore that formal promise is made that the Filipinos shall

have independence when they are fitted for it, it will be accepted by them as a promise of independence in the immediate future.

Dealing with the Filipinos, we must speak with exact truth. The truth may be unpalatable, but they will accept it. But we must not mislead them. Now, if we are right in our plan that we have begun, of trying to do this people good, of extending to them civil liberty, of giving them an opportunity for education, and of learning the art of self-government and political control by exercising a part of it, then it is essential that they should assist, as far as possible, in the government, and should help it along. The movement, in order to be a success, must needs have the support of the intelligent and conservative, but if the issue as to their fitness for self-government is thrust into politics, and the construction of the promise as one of the immediate future follows as it certainly will, then the interest in the present government, even on the part of the most conservative, must wane, and the plans for a gradual education of the Filipinos in self-government must fail. I agree that if all one wishes to do is to set a government going, to fill its offices with intelligent Filipinos, and then to abandon the islands, one may readily fix a time for the purpose, but that is not my idea of THE DUTY OF THE UNITED STATES, now that we are in the islands. If it is, our plan of education is wholly at fault. The moment that we move out of the islands, if we leave in the

few years proposed, the American teachers will go, and the study of English, which has received such an impetus from their presence, will cease to be regarded as a benefit, education will fall by the wayside, and a return will rapidly be made to the condition which existed under Aguinaldo.

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Now, in such a condition of things, when the presence of the United States in the islands is necessary to maintain order and sustain a well-ordered government, to secure civil rights to the people, and to aliens with vested interests, it seems to me most unwise to introduce an issue by a promise of conditional independence which will wean the people away from the importance of the present government and invite them to a discussion of the wisdom of an absolute change. If the people are fit for self-government, then I agree that the declaration ought to be made, and that we ought to turn the islands over. It is a difference on this point that is the real difference between the signers of the petition to the conventions for a promise of independence and those who oppose the signers. I have heard it said by people who have not thought much on the subject that they did not see any great difference between the view of the signers of the petition for independence and mine. **THE DIFFERENCE IS FUNDAMENTAL.** They are really in favor of an Aguinaldo government with a gloss of declarations in favor of liberty and constitutional

freedom and the bill of rights, which, I verily believe, will never have any force whatever. I am in favor of teaching the people how to govern themselves, and I cannot assume that such a lesson, so difficult to learn, can be taught to a people 90 per cent. of whom are grossly ignorant to-day, without any political experience whatever, in five years, as some of our opponents say, or in twenty years, as others suggest.

I regard the learning of English as one of the important steps in the education of these people, important in creating a solidarity among the people and in enabling the people to understand each other, important in bringing them into touch with the Anglo-Saxon world where they shall drink in the principles of civil liberty. My standpoint is the benefit of the Filipino people. To state the matter succinctly, we have secured to the Filipinos, by what we have done, civil liberty, and we are gradually extending to them political control. What the opponents of our policy in effect and result are contending for is that we should turn the islands over to a small minority, who will establish a government in which CIVIL LIBERTY WILL BE LOST and political control reside with a few. The standpoint of the signers of the petition and others who stand with them seems to be that of decently getting rid of a nasty job. I differ with them first, in thinking that the discharge of the duty which is imposed upon us is a bad job or that it is going to involve any such disaster as is prophesied. It is

said that it will implant the spirit of tyranny and absolutism in this country.

As long as those who exercise authority in the Philippine Islands are responsible to the eighty millions of people in this country the spirit of absolutism is sure to be kept well in abeyance. What it will develop, on the contrary, is the spirit of altruism, of a desire to help a poor people who need our help, of a desire to lift them up and to do it at the expense of great national effort and sacrifice. Now, this is said to be, by those who speak for the petitioners, so altruistic as to be what they would call "sentimental" or "lunar politics." I do not agree. Those who urge the delivery over of the islands in a few years evidently think it sufficient if we frame a government, set it working, and let it go. In their anxiety to get rid of the islands, they put themselves unconsciously in the attitude of the United States Senator who, in expressing his earnest desire to get rid of the Philippines, CONSIGNED THEM TO HELL. Their anxiety finds its reason in the fear that the American people, deriving advantage from association with the Philippine Islands of a commercial and financial character, will never be willing to give up their control over the islands, however fit the Filipinos may become for self-government. It is their distrust of the American people that leads such men into anxiety to get rid of the Filipino people before the association shall become profitable.

Now, I do not think that this feeling is justified, because I feel sure that after the Filipino people become well educated, and we have a decent government there in which the Filipino people take part, and the Filipino people request independence, the American people will grant it to them. Why should we be impatient to leave the islands? If we may properly stay five years or twenty years to prepare the people, what objection on principle can there be to our staying until our work is thoroughly done? If it will take forty or fifty years thoroughly to prepare the people for popular government, is it not wiser and better for the Filipinos to maintain the present relation for that time than to allow the people to go at the end of five years and fall into the habits of certain so-called republics of revolution, anarchy, and all sorts of misgovernments? I do not dwell upon a danger which will arise if we set going a government that cannot maintain order and protect vested rights, but foreign intervention in such a case is most probable. In such event the amount of self-government allowed to the Filipinos by an intervening European government is NOT LIKELY TO STRAIN THEIR CAPACITY, however limited. But it is said that the influence of governing the Philippines for a long time upon our Government will be bad. I do not think that thus far it has had an evil influence.

If it were a spoils government there, I agree that it might become a stench in the nostrils of everyone,

but as a matter of fact the government has been entirely nonpartisan. Without knowing the politics of all the judges, and the other appointees of the islands, I think it only fair to say that there are about as many Democrats in the government as there are Republicans. A civil-service law, much more stringent than the national civil-service law, is enforced with fidelity, and while there is much difficulty in obtaining a suitable personnel for the whole government in the islands, I think we have been fairly successful in getting competent agents. While the criticism of the anti-imperialists and their attacks upon the policy of the Government worked great injury in misleading the Filipinos into a continuance of the war, their criticism has perhaps unwittingly been of some value in upholding THE STANDARD OF THE GOVERNMENT in the islands, because it has put that government on trial from the beginning, and has made every member of it strain himself to make it worthy of approval.

What the Filipino people need now, first of all, is material development in the islands, and that the people of the United States can secure them if the Philippine government is given the requisite powers. It is a development that under an independent government would come much more slowly (if indeed it came at all) than it will under the auspices of the Government of the United States. Capital will feel greatly more secure under a government which has the guiding hand and brake of the United States

than it would under Aguinaldo and his followers. The cost to the people of getting capital into the country will be vastly reduced. The permanence of the improvements and their character will be much better for the country under present conditions than where the uncertainty of a changing government will treble or quadruple the risk.

Our policy in the Philippines must be "The Philippines for the Filipinos." This duty we have assumed and it is the duty which we shall doubtless discharge. It is fortunate that this policy is also the best policy from a selfish standpoint, for thus we have additional assurance of its being maintained. The more we develop the islands, the more we teach the Filipinos the methods of maintaining well-ordered government, the more tranquility succeeds in the islands, the better the business, the greater the products, and the more profitable the association with those islands in a business way. If we ultimately take the Philippines in behind the tariff wall, as I hope and pray we may, and give them the benefit for their peculiar products of the markets of the United States, it will have a tendency to DEVELOP THAT WHOLE COUNTRY, of inviting the capital of the United States into the islands, and of creating a trade between the islands and this country which cannot but be beneficial to both. Now, under these circumstances, is it impracticable, is it wild to suppose that

the people of the islands will understand the benefit that they derive from such association with the United States and will prefer to maintain some sort of bond so that they may be within the tariff wall and enjoy the markets, rather than separate themselves and become independent and lose the valuable business which our guardianship of them and our obligation to look after them has brought to them?

Have we not given an earnest of our real desire to teach them the science of self-government by providing that in two years after the census shall be published a popular assembly, which shall exercise equal authority with the Commission in a legislative way in the islands, shall be elected by popular vote? I do not look for very encouraging results from the first or second session of this assembly. I have no doubt that in the beginning there will be in the assembly extreme and violent partisans of immediate independence and of autonomy and a protectorate and of a great many other impracticable schemes, some of which will include attempts to obstruct the government. By proposed legislation of various kinds, members will seek to accomplish purposes that are incapable of accomplishment by legislation, but I shall not be discouraged at this, for that is to be expected of a people who have had no legislative experience.

Ultimately they will reach the **SAFE AND SANE CONCLUSION** that laws which are to be passed are those which their experience justifies, and that discussion

and analysis and calm consideration and self-restraint are all necessary for successful legislative measures. It is said that we are giving them this legislature too soon. I think my friend, Mr. Colquhoun, thinks so. For my part I think not. The people desire it. It will be an imperfect but useful medium of communicating their wishes, and it will offer the most valuable school to the intelligent part of the population in the science of government. It must be borne in mind that it is not only the 90 per cent. of ignorant Filipinos who need to be tutored in the art of self-government, but the remaining 10 per cent., even including the 1 per cent. of the cultured and educated, are sadly in need of political education, and they may find it in the popular assembly and may learn the difference between theory and practice in carrying on a just government.

Does it not seem rather unreasonable now to insist upon promising independence in advance even of the trial of the test of political capacity in the control of one legislative chamber?

But I am asked how capable of self-government must the people become before we give them an OPPORTUNITY TO BE INDEPENDENT, if they will. Is it to be a perfect government like Plato's Republic? If so, it will never come. The government by the people of the Philippine Islands, like the government by the people of other countries, will always have defects. The only standard which can be laid down

is that the common people shall be educated by elementary education to understand simple principles of government, and to be capable of forming an intelligent opinion, which shall control their officers while in office. People among whom there is an intelligent public opinion are capable of self-government. That is the goal toward which we ought to move in the Philippine Islands. If we follow out the programme, which I hope we may, and it wins supporters as it progresses, we may reasonably count on obtaining the gratitude of the people of the Philippine Islands, which President McKinley spoke of in his instructions to Secretary Root, when he said:

“A HIGH AND SACRED OBLIGATION rests upon the Government of the United States to give protection for property and life, civil and religious freedom, and wise, firm and unselfish guidance in the paths of peace and prosperity to all the people of the Philippine Islands. I charge this Commission to labor for the full performance of this obligation, which concerns the honor and conscience of their country, in the firm hope that through their labors all the inhabitants of the Philippine Islands may come to look back with gratitude to the day when God gave victory to American arms at Manila and set their land under the sovereignty and protection of the people of the United States.”

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Concerning the objection that this is a new business for the United States, which will have a demoralizing effect upon the nation, I think no one is able to point out any injury which has thus far resulted to the people of the United States except the expense attendant upon the maintenance of law and order in the islands during the insurrection, and the regrettable loss of life which occurred. Certainly no one thus far can show the baleful effects of that dreadful spirit of greed which the opponents of the policy are so prone to see in everything done with respect to the Philippines. I challenge them to point out anything which has been done to the Philippine Islands, either immediately under the government there established, or by the United States, which savors in the least of A SELFISH USE OF THOSE ISLANDS for the benefit, either of the individuals in the United States or of the Government itself. The only thing which can be seriously made the basis of such a charge was the attempt during the present session of Congress to put in force the coastwise trading laws for the benefit of the shipping of the United States in respect to the trans-oceanic trade between the islands and the United States, and that by Act of Congress has now been postponed for two years longer. There has been a rebate provided of the export duty on hemp imported directly from the islands to the United States. This has not affected injuriously the trade of the islands, because the demand for hemp is so great

that the islands have a monopoly in respect to it. There has unexpectedly been caused by the rebate a reduction of the income in the islands of about \$250,000, because the equivalent which was provided as a counter benefit, to wit, the duties to be collected on imports from the islands into the United States, has not equaled the aggregate rebate on the hemp. This, however, was a miscalculation by the legislators that was pardonable and can easily be rectified. In every other respect the legislation which has been enacted has been in favor of the islands, including a gift of three millions of dollars for the purpose of relieving distress there. The attitude of those who support the Government in its policy is altruistic. It is of one who out of a FEELING FRIENDLY TO THE FILIPINOS would sacrifice much to accomplish the purposes of the Administration there. It is a feeling which does the nation credit, and a feeling that a nation of the wealth and power that this nation has may well afford to encourage.

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The islands themselves give every indication of furnishing revenue sufficient to carry out the plans which the United States may properly carry out in the material and intellectual development of the country and its people. The taxpaying capacity of the country is, of course, determined by that which it produces for domestic and foreign use. For the last two or three years the wealth produced in the islands has

been seriously impaired and reduced, not only by the war and the cholera, but also and chiefly by the loss of draft animals, ninety per cent. of which have succumbed to the rinderpest. Agriculture has been dependent upon such animals and the recovery from this blow must necessarily be slow. Congress appropriated three millions of dollars to assist the islands in restocking plantations, but the enormous difficulties attending the importation from other countries of cattle which are able to live in the Philippines are only known to those who have attempted it. I am glad to say, however, that our scientists in the islands have discovered a method of preventing a recurrence and spread of the disease, so that when the plantations are restocked rinderpest will have NO TERRORS FOR THE FARMERS. With normal conditions in agriculture, when the cattle shall have been restored by breeding and otherwise to their usual number, the islands will always be self-supporting, and will, doubtless, furnish a surplus of revenue with which to meet the demands for improvements which present themselves in every part of the islands.

The Philippine Archipelago is the only country in which can be produced what is known as Manila hemp, or what is called in the Spanish language "*abaca*." . . . Of the forty-one provinces of the Philippine Islands, at least fifteen now produce commercial quantities of hemp. To-day, owing to the insufficient means of communication and trans-

portation, many fields of hemp are allowed to rot and are not stripped or used. In many of the provinces there is wild hemp which is not so good in texture and which it would be necessary to replace by cultivated plants were the opportunity offered to put it on the market. From experiments by our Agricultural Bureau, I have no doubt that the number of provinces in which hemp could be raised might be doubled. THE DEMAND FOR HEMP IS SO GREAT that while an increase in its production might reduce the price, the total product would far exceed in value that which the statistics now show.

Many parts of the islands are very rich in cocoanuts. . . . In the province of Laguna within the last two years, since the war was over, there have been planted more than five times the number of trees which were there before. There is a constant market for copra, which is the dried meat of the cocoanut, and the price is rising. Since the demand for hemp and cocoanuts has increased so largely planters have abandoned the raising of rice, preferring to buy their food out of the profit of the hemp or cocoanut industry. Therefore, for ten or fifteen years it has been the habit of the islands to import rice, although there are no islands where rice will grow to better advantage than in the Philippines. The amount of importation, however, was comparatively small until the destruction of the draft cattle, three years ago, which reduced the actual amount of rice production in the

islands far below what was necessary to feed the people, and during the last year about \$12,000,000, gold, had to be expended in importing rice from French China.

The sugar and tobacco industries in the islands are CAPABLE OF A CONSIDERABLE INCREASE. The Island of Negros contains sugar land as rich as any in the world, and the provinces of Cagayan, Isabela and Union, contain tobacco lands which, next to Cuba, produce the best tobacco in the world, but the trouble is that the markets for such sugar and tobacco have been, by tariffs imposed in various countries, very much reduced. Should the markets of the United States be opened to the Philippines, it is certain that both the sugar and the tobacco industry would become thriving, and although the total amount of the product in each would probably not affect the American market at all, so extensive is the demand here for both tobacco and sugar it would mean the difference between poverty and prosperity in the islands. I know that the reduction of the tariff for this purpose is much opposed by the interests which represent beet sugar and tobacco, but I believe that a great majority of the people of the United States are in favor of opening the markets to the Philippine Islands, conscious that it will not destroy either the beet sugar or the tobacco industry of this country, and feeling that as long as we maintain the association which we now have with the Philippine Islands, IT IS OUR DUTY TO

GIVE THEM THE BENEFIT of the markets of the United States and bring them as close to our people and our trade as possible. Nothing else will justify the application of the coastwise trading laws to the trans-oceanic trade between the United States and the Philippine Islands, but if they are invited to partake of the benefits of the protection theory, they may well be subjected to the rule that as between the United States and themselves the products are to be transferred in American bottoms.

Another immense source of wealth in the islands is the ALMOST INEXHAUSTIBLE SUPPLY of the most beautiful woods, of rubber, and of the most valuable gums. These sources of wealth are hardly developed.

And now what as to the existing trade between the United States and the Philippines. It is still quite small, not exceeding five millions in any one year of merchandise transferred from the United States to the Philippines, but increasing largely in the products transferred from the Philippines to the United States. The latter increase, however, is not a natural one. It is brought about by Congressional legislation already mentioned, which confers the benefit of \$7.40 a ton rebate from export tax upon all hemp transported directly from the Philippines to the United States. The total business done between the United States and the Philippines is something like seventeen millions. With the restoration of normal conditions in the islands, with the construction of

railways and other material development, then I have no doubt that this trade between the United States and the islands would be trebled in the course of five years.

The conditions with respect to the business of the United States merchants in the islands to-day are unfortunate, and their cause can easily be traced. The Government of the United States went into the islands under a distinct promise that it would govern the Philippines for the benefit of the Filipinos; that it would EXTEND SELF-GOVERNMENT TO THE FILIPINOS as rapidly as they showed themselves fit for it, and that as many Filipinos as possible would be used in the personnel of the Government. This has always been the attitude of the Government, and never, so far as I know, has there been a single step of departure from it. It was the attitude declared before the war of insurrection began, while it was pending, and at its close, and no resistance on the part of the natives has varied our position in that regard. This policy did not meet, as was natural, the ready assent of all the army or of those persons who were in sympathy with the army. The adventuresome spirits who followed the army for the purpose of establishing a business in its wake found that they had all that they could do to supply the demand made by the army for American goods, and as American capital came in dribblets or in larger sums it was turned into the business of supplying the army with those things which

the Government did not supply. Four or five trading companies were thus organized, embracing substantially all the American enterprise that has appeared in the islands during the first three or four years of American occupation. American merchants thus situated easily CAUGHT THE FEELING OF HOSTILITY and contempt felt by many of the soldiers for the Filipinos, and were most emphatic in condemning the policy of the Government in attempting to attract the Filipinos and make them so far as might be a part of the new civil order. The American newspapers which were established readily took the tone of their advertisers and their subscribers, and hence it is that the American community in the Philippines to-day is largely an anti-Filipino community. The 75,000 soldiers whose demands for supplies made their business so profitable, have now been reduced to 15,000, and the market which made the American merchants for a time independent of the Filipinos has now almost entirely disappeared. The condemnation by such merchants of the Civil Government continues, and they do not hesitate to make the Government the scapegoat for the failure of business to improve. The fact is that their customers have gone back to the United States and that their attitude towards the Filipinos is such that the Filipinos are not disposed to patronize them. This is unfortunate, and there must come into the islands a new set of merchants who shall view the situation from an entirely different stand-

point. There are 7,600,000 Filipinos. Of these, the 7,000,000 Christian Filipinos are imitative, anxious for new ideas, willing to accept them, willing to follow American styles, American sports, American dress and American customs. A large amount of cotton goods is imported into the islands each year, but this is nearly all from England and Germany. There is no reason why these cotton goods should not come from America, except the fact that there are no American houses in the islands that have devoted their ATTENTION TO WINNING FILIPINO TRADE. I am not a business man, but I know enough to assert that it is not the best way to attract custom from an alien people to call them names, to make fun of them, and to decry every effort towards their advancement and development. In other words, the American merchants in the Philippines have gotten off on the wrong foot. There should be a radical change.

There are a few projected railroad lines in the Philippines which it would be possible to induce capital to build without a guaranty of income, but it is wiser, it seems to the Commission, to attempt to introduce a general system of railways than to have a link built here and a link built there and to await the process of time before trunk lines shall be established. For instance, it is quite probable that a short line of forty or fifty miles would be constructed without a guaranty in the province of Legaspi, where is the rich hemp business and where it has been cus-

tomary during the last two or three hemp seasons to pay forty dollars Mexican a day for a *carabao* cart; so, perhaps, it would be possible to secure the construction of a line without a guaranty from Manila south to Batangas, though of this I am not certain. With the hope, however, of bringing capital in considerable amount to the islands, a bill has been prepared, which has passed the House, authorizing the Philippine Government to grant FRANCHISES FOR THE CONSTRUCTION OF RAILWAYS with a guaranty of income of not more than five per cent. on the amount actually invested for not exceeding thirty years. In most cases a guaranty of a less percentage would be sufficient, but my impression is that with respect to the main trunk line from Aparri to Manila, the difficulties of construction and the delay in securing a profitable business would probably require an assurance of five per cent. dividends. The opposition of those who oppose the investment of any American capital in the islands which shall furnish a motive for a longer association between the two countries than is absolutely necessary may postpone the passage of the bill until the next session of Congress.* I shall deeply regret the delay, but I am not discouraged, for as long as I continue in my present position I expect

* The Commission has been granted authority to make the contracts in question and construction will be commenced upon the contemplated railroad system early in 1906.—AUTHOR.

to press the legitimate claims of the Philippine Islands upon a just and generous Government for such authority in the local government as will permit a proper development of the material resources of the islands; and the delay in legislation, which is incident, not to the opposition of a majority but to the opposition of a small minority, while it is apt to try one's patience, ought nevertheless not to discourage.

I come now to THE QUESTION OF LABOR, which has been made the basis for the most discouraging accounts of conditions in the Philippine Islands. The Filipino is a tropical laborer. In times past a large amount of rice has been raised in the islands, a large amount of tobacco, a large amount of sugar, and a large amount of hemp, and they all involve, as a material part of the cost of their production, the labor of the natives. The Chinamen, who have been said by mistaken persons to number a million or a million and a half in the islands, in fact do not number 100,000, and none of them do any agricultural work of any kind in the Philippine Islands. The Filipino is naturally an agriculturist. When you go through his village in the middle of the day you will probably see him lounging about the window or on the seat in front of his house, and you will ascribe to him the laziest habits, because you do not know that he has been up at four o'clock in the morning and has worked from that time until nine or ten in the fields, and that he will begin work again at four o'clock and work

for two or three hours until sundown or later. The American merchant is loud in his denunciation of the insufficiency of the Filipino laborer. This is because the PRICE OF LABOR HAS PROBABLY DOUBLED since the Americans went there, and he has heard the tale of how cheap labor was before the Spanish *régime* ended. He also compared the cost of labor in the Philippine Islands with that in Hong Kong, and he finds that is very considerably less all over China. I am not contending that the labor in the Philippines is as good as Chinese labor, for that labor is the best in the world, probably, when economy in wages and efficiency in product are considered, but what I wish to dispute is that the labor conditions in the Philippines are hopeless. The city of Manila has under its control, and in its employment, about 3,000 laborers, and they are paid all the way from fifty cents Mexican to \$1.25 Mexican, and there is no complaint whatever on the part of the authorities that their work is not properly and well done. The Quartermaster's Department of the army has about the same number, and their reports of the efficiency of Filipino labor are exceedingly encouraging. We have now employed really as coolies on the Benguet Road in the most difficult drilling and construction work about 3,000 natives, and while their efficiency is nothing like that of the American, in the accomplishment of work in proportion to the pay, they probably get through about as much. The men who are constructing the harbor

works at Manila—The Atlantic, Pacific and Gulf Company—have employed upwards of 800 to 1,000 Filipinos in their quarries. At first they found it very difficult to secure workmen, but now they HAVE MORE LABOR THAN THEY NEED. They use about eight per cent. of white foremen and the rest natives. They give to the natives houses, furnish a church, a band, a cock pit and a school. On their *fiesta* days they give them vacation. They have less desertions, less absenteeism, than with Americans. These experiments only show that the solution of the labor problem in the Philippines is teaching the Filipinos how to work. Sir William Van Horne reports that he found much difficulty originally in the construction of the Cuban railways because the natives were not acquainted with how the work should be done, but that by means of white foremen they were easily taught, and that then they made good laborers. I feel sure that the same thing will prove to be true of the Filipinos.

There is doubtless a great deal of mineral wealth in the islands, but it will only be available after transportation shall have been introduced. It is not an island with a bonanza mine in it, though at some distant day such a vein may be discovered there. There is CERTAINLY COAL IN THE ISLANDS in considerable quantities. There is now between the islands a considerable inter-island trade, and there are quite a large number of ships engaged therein. Without it the islands could not live; it is their arterial circulation.

The present system might be much improved by introducing American generous methods of dealing with the public. About two and a half millions of capital has been invested in a street railway in Manila, which will be completed next Thanksgiving Day.* This will certainly change one of the annoying and expensive features of Manila life, and will give to the residents of the city opportunity to cut down their present expense of living at least twenty-five per cent. There is no city in the world where there is so much traveling done in carriages, due to the fact that people may not walk about safely under the tropical sun. The presence of a street railway will do away with the necessity for many of these conveyances, and the streets will be less used and their condition much improved.

There is a sufficient CONTINUOUS FALL OF WATER IN STREAMS within practicable distance of Manila to furnish electrical power exceeding fifteen thousand horse power. With the high price of coal this is an important aid to manufacturers.

The English houses and the Spanish houses who have dealt in the export trade in the islands have earned large profits during the occupancy of the United States.

It is said that the health of the islands is such as to preclude Americans from going there. This is not

* It is now operating about thirty-five miles of line in a highly satisfactory manner.—AUTHOR.

true. The climate does prevent one from going out into the sun in the middle of the day, and so prevents his working in the fields as a laboring man, but it is entirely possible for one to live in the islands for years, and if he does not neglect the ordinary rules of hygiene, to be free from bad health. The province of Benguet, which is 150 miles from Manila, and which will soon be reached by a railroad and an electric road in twelve hours, offers a climate quite like the summer climate of the Adirondacks or of Canada. Under the land regulations, which go into force at the time of the adjournment of Congress, A SUMMER CAPITAL IS TO BE ESTABLISHED at Baguio, and town lots in the same place will be offered at public auction. Americans engaged in business may, at small cost, buy lots and erect houses and live there as many months of the year as they choose, except the months of August and September, which are usually so wet as to make it unprofitable. During remaining months of the year the climate is beautiful, the temperature going down as low as 35 degrees Fahrenheit, and rarely, if ever, reaching 80 degrees.

It is estimated that not more than five millions of acres of land are owned by natives in the islands, and that the remainder, sixty-five millions, is owned by the Government. This remainder will, under the land regulations, be opened for settlement and purchase at the adjournment of the present session of Congress. There is every prospect that the land will be

taken up by both Filipinos and Americans. The maximum limitation for purchase by a company is 2,500 acres. This limitation is much too low for the cultivation of sugar, but is sufficiently extensive for the cultivation of other products. There is a provision in the law by which irrigation companies may own stock in land companies, so that probably the limitation may be evaded if private profit requires. THE FUTURE OF THE PHILIPPINE ISLANDS of course it would be dangerous to prophesy with certainty, but with a change in the hygienic conditions that surround life, due to an effective board of health, with a supply of pure water from the sinking of driven wells all over the country, which the pending bill in Congress will encourage, I feel sure that the population will rapidly increase.

We hold the Philippines for the benefit of Filipinos and we are not entitled to pass a single act or approve a single measure that has not that as its chief purpose. But it so happens, and it fortunately so happens, that generally everything we do for the benefit of the Filipinos and the Philippines will only make their association with the United States more profitable to the United States. I do not base my prayer for a continuance of the present policy toward the Philippine Islands on selfish grounds, but as this is the Chamber of Commerce, and as it is naturally interested in the possibilities of commerce in these distant islands, I have felt justified in referring more

than heretofore to the industrial conditions existing there and the possibility of improvement and the increase of trade between the United States and the Philippines.

THE FIRST REQUISITE OF PROSPERITY in the Philippine Islands is tranquility, and this should be evidenced by a well-ordered government. The Filipinos must be taught the advantages of such a government, and they should learn from the government which is given them the disadvantages that arise to everybody in the country from political agitation for a change in the form of government in the immediate future. Hence it is that I have ventured to oppose with all the argument that I could bring to bear the petition to the political conventions asking that independence be promised to the Filipinos. It is not that I am opposed to independence in the islands, should the people of the Philippines desire independence when they are fitted for it, but it is that the great present need in the islands is tranquility, the great present need in the islands is the building up of a permanent, well-ordered government, the great present need in the islands is the increase of the saving remnant of conservative Filipinos whose aid in uplifting and maintaining the present government on a partly popular and strictly civil liberty basis, shall be secured. A promise such as that which is petitioned for cannot but introduce at once into the politics of the islands the issue of independence, of present fitness for self-

government, and will frighten away from the support of the present government the conservative element which is essential to its success, and yet which is always timid lest by a change bringing the violent and the irreconcilable to the front, they shall suffer by reason of their prominence in aid of the present government. The promise to give independence helps no one. THERE IS NO NEED OF THAT PROMISE to secure tranquility because we have tranquility in the islands. It is certain to be misunderstood as a promise to be complied with in the present generation, and if, as is probable, the people shall not be fitted for self-government in the present or the next generation, then the failure to give it will be regarded as a breach. Why not let the politics of the islands take care of themselves? Why should the good people who signed the petition intermeddle with something the effect of which they are very little able to understand. Why not take the broader policy, which is that of doing everything beneficial to the Philippine Islands, of giving them a full market, of offering them an opportunity to have railroads built extensively through the islands, and of having a tranquility which is essential to the development of their business and their prosperity; why not insist on the spread of the educational system, of an improvement in the health laws, and subject everything that is done in the islands to an examination as to whether it is beneficial to the Filipino people, and then when all has been done

for the Philippines that a government can do, and they have been elevated and taught the dignity of labor, the wisdom of civil liberty and self-restraint in the political control indispensable to the enjoyment of civil liberty, when they have learned the principles of successful popular self-government from a gradually enlarged experience therein, we can discuss the question whether independence is what they desire and grant it, or whether they prefer the retention of a closer association with the country which, by its guidance, has unselfishly led them on to better conditions.

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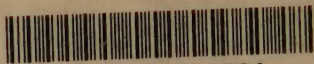
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